



# SPEC® CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

**SPECint®2006 = 20.8**

CELSIUS M460, Intel Core 2 Quad Q6700 processor

**SPECint\_base2006 = 18.6**

CPU2006 license: 22

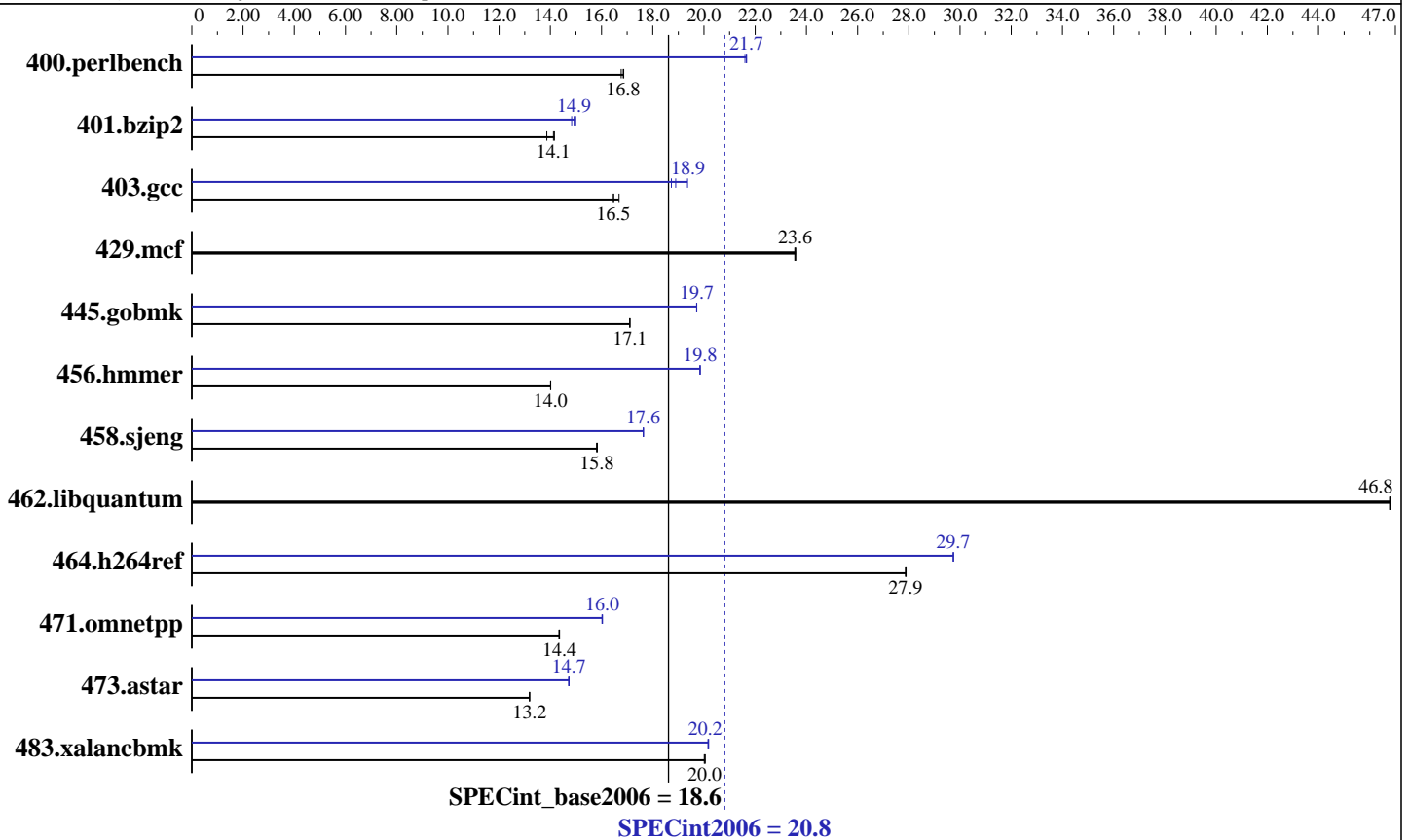
Test date: Dec-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Nov-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007



### Hardware

CPU Name: Intel Core 2 Quad Q6700  
 CPU Characteristics:  
 CPU MHz: 2667  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip  
 CPU(s) orderable: 1 chip  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 8 MB I+D on chip per chip, 4 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 4 GB (4x1 GB PC2-6400 CL6 SDRAM)  
 Disk Subsystem: 1 x 400 GB SATA II 7200 RPM  
 Other Hardware: None

### Software

Operating System: Microsoft Windows Vista Ultimate (x64)  
 Compiler: Intel C++ Compilers for IA-32 and for Intel64, 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, Version 8.1



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

SPECint2006 = **20.8**

CELSIUS M460, Intel Core 2 Quad Q6700 processor

SPECint\_base2006 = **18.6**

CPU2006 license: 22

Test date: Dec-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Nov-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	583	16.8	579	16.9	<b>580</b>	<b>16.8</b>	<b>451</b>	<b>21.7</b>	452	21.6	451	21.7
401.bzip2	<b>683</b>	<b>14.1</b>	696	13.9	681	14.2	651	14.8	<b>646</b>	<b>14.9</b>	644	15.0
403.gcc	<b>489</b>	<b>16.5</b>	489	16.5	483	16.7	430	18.7	416	19.4	<b>426</b>	<b>18.9</b>
429.mcf	387	23.6	<b>387</b>	<b>23.6</b>	387	23.5	387	23.6	<b>387</b>	<b>23.6</b>	387	23.5
445.gobmk	613	17.1	613	17.1	<b>613</b>	<b>17.1</b>	<b>532</b>	<b>19.7</b>	532	19.7	532	19.7
456.hmmmer	<b>666</b>	<b>14.0</b>	666	14.0	666	14.0	470	19.9	470	19.8	<b>470</b>	<b>19.8</b>
458.sjeng	764	15.8	<b>765</b>	<b>15.8</b>	765	15.8	686	17.6	<b>686</b>	<b>17.6</b>	687	17.6
462.libquantum	443	46.8	<b>443</b>	<b>46.8</b>	443	46.8	443	46.8	<b>443</b>	<b>46.8</b>	443	46.8
464.h264ref	793	27.9	794	27.9	<b>794</b>	<b>27.9</b>	<b>744</b>	<b>29.7</b>	744	29.7	744	29.7
471.omnetpp	435	14.4	<b>435</b>	<b>14.4</b>	436	14.3	<b>390</b>	<b>16.0</b>	390	16.0	390	16.0
473.astar	532	13.2	<b>532</b>	<b>13.2</b>	532	13.2	<b>477</b>	<b>14.7</b>	477	14.7	476	14.7
483.xalancbmk	344	20.0	345	20.0	<b>344</b>	<b>20.0</b>	342	20.2	342	20.2	<b>342</b>	<b>20.2</b>

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

## Operating System Notes

OMP\_NUM\_THREADS set to number of cores (default).

## Platform Notes

BIOS default settings have been used.

## General Notes

All binaries were built with 32-bit Intel compiler except:  
401.bzip2 and 456.hmmmer 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



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint2006 = 20.8

CELSIUS M460, Intel Core 2 Quad Q6700 processor

SPECint\_base2006 = 18.6

CPU2006 license: 22

Test date: Dec-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Nov-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

## Base Portability Flags

403.gcc: -DSPEC\_CPU\_WIN32  
464.h264ref: -DSPEC\_CPU\_NO\_INTTYPES -DWIN32  
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



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint2006 = 20.8

CELSIUS M460, Intel Core 2 Quad Q6700 processor

SPECint\_base2006 = 18.6

CPU2006 license: 22

Test date: Dec-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Nov-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

## Peak Portability Flags

401.bzip2: -DSPEC\_CPU\_P64  
 403.gcc: -DSPEC\_CPU\_WIN32  
 456.hmmr: -DSPEC\_CPU\_P64  
 464.h264ref: -DSPEC\_CPU\_NO\_INTTYPES -DWIN32  
 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.hmmr: -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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

**Fujitsu Siemens Computers**

**SPECint2006 = 20.8**

CELSIUS M460, Intel Core 2 Quad Q6700 processor

**SPECint\_base2006 = 18.6**

**CPU2006 license:** 22

**Test date:** Dec-2007

**Test sponsor:** Fujitsu Siemens Computers

**Hardware Availability:** Nov-2007

**Tested by:** Fujitsu Siemens Computers

**Software Availability:** Nov-2007

## 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.20090714.01.html](http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.01.html)

You can also download the XML flags source by saving the following link:

[http://www.spec.org/cpu2006/flags/CPU2006\\_flags.20090714.01.xml](http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.01.xml)

SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester.  
For other inquiries, please contact [webmaster@spec.org](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.  
Report generated on Tue Jul 14 10:50:05 2009 by SPEC CPU2006 PS/PDF formatter v6323.