



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

**SPECint®2006 = 26.1**

PRIMERGY CX122 S1, Intel Xeon E5606, 2.13 GHz

**SPECint\_base2006 = 24.8**

CPU2006 license: 19

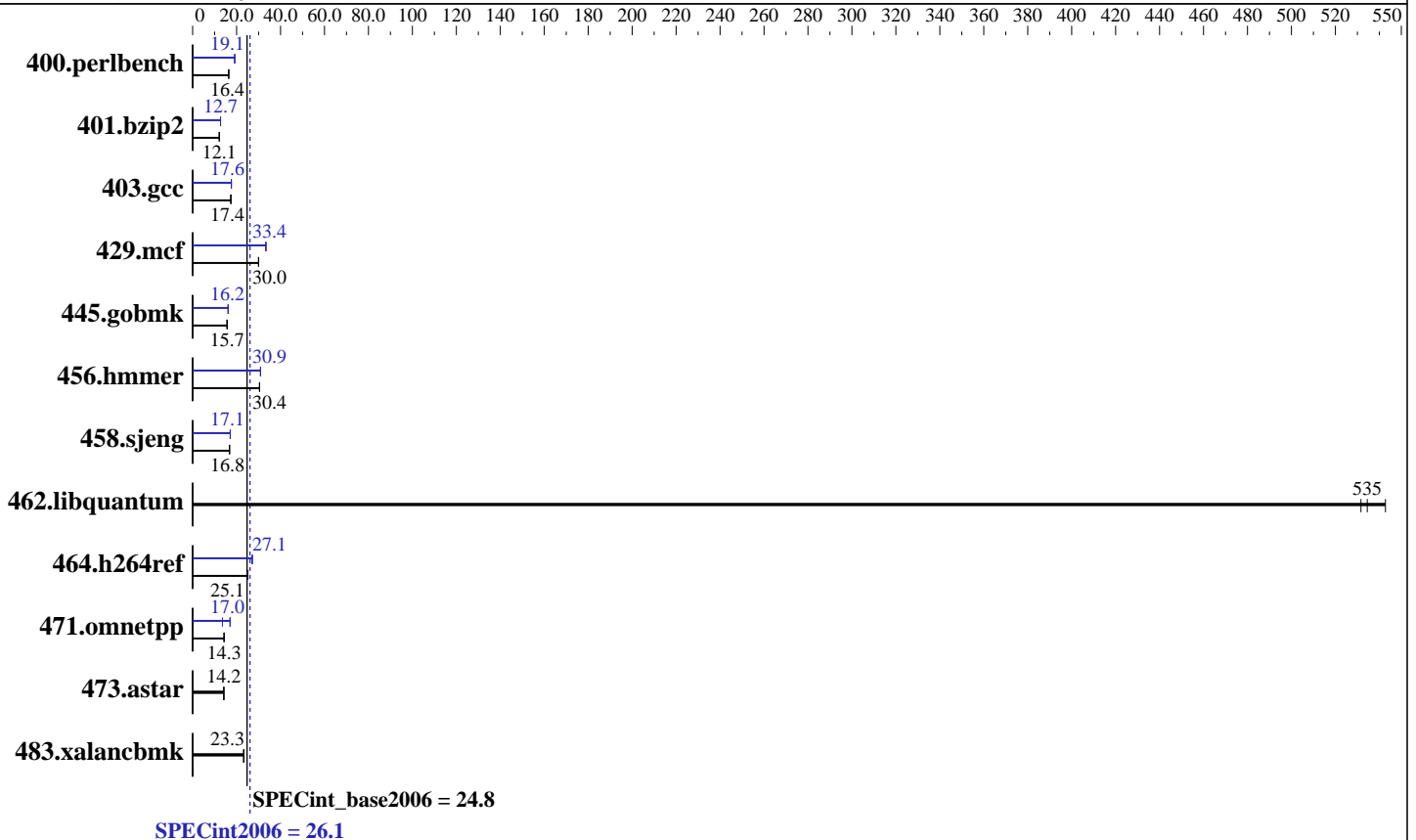
Test date: Feb-2011

Test sponsor: Fujitsu

Hardware Availability: Feb-2011

Tested by: Fujitsu

Software Availability: Jan-2011



### Hardware

CPU Name: Intel Xeon E5606  
 CPU Characteristics:  
 CPU MHz: 2133  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 256 KB I+D on chip per core  
 L3 Cache: 8 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 96 GB (12 x 8 GB 2Rx4 PC3-10600R-9, ECC, running at 1067 MHz and CL7)  
 Disk Subsystem: 1 x SATA, 160 GB, 5400 RPM  
 Other Hardware: --

### Software

Operating System: SUSE Linux Enterprise Server 11 (x86\_64) with SP1, Kernel 2.6.32.12-0.7-default  
 Compiler: Intel C++ Intel 64 Compiler XE for applications running on Intel 64 Version 12.0.1.116 Build 20101116  
 Auto Parallel: Yes  
 File System: ext3  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32/64-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V9.01



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

SPECint2006 = **26.1**

PRIMERGY CX122 S1, Intel Xeon E5606, 2.13 GHz

SPECint\_base2006 = **24.8**

CPU2006 license: 19  
Test sponsor: Fujitsu  
Tested by: Fujitsu

Test date: Feb-2011  
Hardware Availability: Feb-2011  
Software Availability: Jan-2011

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	<b>596</b>	<b>16.4</b>	598	16.3	593	16.5	511	19.1	<b>511</b>	<b>19.1</b>	510	19.2
401.bzip2	<b>796</b>	<b>12.1</b>	796	12.1	796	12.1	<b>760</b>	<b>12.7</b>	760	12.7	760	12.7
403.gcc	<b>463</b>	<b>17.4</b>	462	17.4	463	17.4	457	17.6	457	17.6	<b>457</b>	<b>17.6</b>
429.mcf	304	30.0	<b>304</b>	<b>30.0</b>	304	30.0	273	33.4	274	33.2	<b>273</b>	<b>33.4</b>
445.gobmk	665	15.8	<b>666</b>	<b>15.7</b>	675	15.6	649	16.2	649	16.2	<b>649</b>	<b>16.2</b>
456.hammer	306	30.5	307	30.4	<b>307</b>	<b>30.4</b>	302	30.9	302	30.9	<b>302</b>	<b>30.9</b>
458.sjeng	721	16.8	721	16.8	<b>721</b>	<b>16.8</b>	707	17.1	<b>707</b>	<b>17.1</b>	708	17.1
462.libquantum	38.2	543	<b>38.8</b>	<b>535</b>	39.0	532	38.2	543	<b>38.8</b>	<b>535</b>	39.0	532
464.h264ref	<b>883</b>	<b>25.1</b>	883	25.1	881	25.1	817	27.1	<b>816</b>	<b>27.1</b>	815	27.1
471.omnetpp	<b>437</b>	<b>14.3</b>	436	14.3	437	14.3	461	13.6	367	17.0	<b>367</b>	<b>17.0</b>
473.astar	<b>494</b>	<b>14.2</b>	494	14.2	495	14.2	<b>494</b>	<b>14.2</b>	494	14.2	495	14.2
483.xalancbmk	<b>296</b>	<b>23.3</b>	296	23.3	298	23.1	<b>296</b>	<b>23.3</b>	296	23.3	298	23.1

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  
Hugepages were not configured on the system

## Platform Notes

BIOS configuration:  
Data Reuse Optimization = Disable

## General Notes

OMP\_NUM\_THREADS set to number of cores  
For information about Fujitsu please visit: <http://www.fujitsu.com>  
Binaries were compiled on RHEL5.5 with binutils-2.17.50.0.6-14.el5

## Base Compiler Invocation

C benchmarks:  
icc -m64  
  
C++ benchmarks:  
icpc -m64



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECint2006 = 26.1**

PRIMERGY CX122 S1, Intel Xeon E5606, 2.13 GHz

**SPECint\_base2006 = 24.8**

**CPU2006 license:** 19

**Test sponsor:** Fujitsu

**Tested by:** Fujitsu

**Test date:** Feb-2011

**Hardware Availability:** Feb-2011

**Software Availability:** Jan-2011

## Base Portability Flags

```

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

```

## Base Optimization Flags

C benchmarks:

```

-xSSE4.2 -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

```

C++ benchmarks:

```

-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/smartheap -lsmartheap64
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

```

## Base Other Flags

C benchmarks:

```

403.gcc: -Dalloca=_alloca

```

## Peak Compiler Invocation

C benchmarks (except as noted below):

```

icc -m64

400.perlbench: icc -m32

429.mcf: icc -m32

445.gobmk: icc -m32

464.h264ref: icc -m32

```

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECint2006 = 26.1**

PRIMERGY CX122 S1, Intel Xeon E5606, 2.13 GHz

**SPECint\_base2006 = 24.8**

CPU2006 license: 19

Test date: Feb-2011

Test sponsor: Fujitsu

Hardware Availability: Feb-2011

Tested by: Fujitsu

Software Availability: Jan-2011

## Peak Compiler Invocation (Continued)

C++ benchmarks (except as noted below):

icpc -m64

471.omnetpp: icpc -m32

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32

401.bzip2: -DSPEC\_CPU\_LP64

403.gcc: -DSPEC\_CPU\_LP64

456.hmmer: -DSPEC\_CPU\_LP64

458.sjeng: -DSPEC\_CPU\_LP64

462.libquantum: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX

473.astar: -DSPEC\_CPU\_LP64

483.xalancbmk: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX

## Peak Optimization Flags

C benchmarks:

400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-opt-prefetch -ansi-alias  
-B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div -prof-use(pass 2) -auto-ilp32  
-opt-prefetch -ansi-alias

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -inline-calloc  
-opt-malloc-options=3 -auto-ilp32  
-B /usr/share/libhugetlbfs/ -Wl,-melf\_x86\_64 -Wl,-hugetlbfs-link=BDT

429.mcf: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-auto-ilp32 -ansi-alias  
-B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
-auto-ilp32 -ansi-alias  
-B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32  
-ansi-alias  
-B /usr/share/libhugetlbfs/ -Wl,-melf\_x86\_64 -Wl,-hugetlbfs-link=BDT

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint2006 = 26.1

PRIMERGY CX122 S1, Intel Xeon E5606, 2.13 GHz

SPECint\_base2006 = 24.8

CPU2006 license: 19

Test date: Feb-2011

Test sponsor: Fujitsu

Hardware Availability: Feb-2011

Tested by: Fujitsu

Software Availability: Jan-2011

## Peak Optimization Flags (Continued)

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-unroll4

462.libquantum: basepeak = yes

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-unroll2 -ansi-alias  
-B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

C++ benchmarks:

471.omnetpp: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-opt-ra-region-strategy=block -ansi-alias -Wl,-z,muldefs  
-L/smartheap -lsmartheap  
-B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

473.astar: basepeak = yes

483.xalancbmk: basepeak = yes

## Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.20110316.html>  
<http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revA.20110316.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.20110316.xml>  
<http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revA.20110316.xml>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

**SPECint2006 = 26.1**

PRIMERGY CX122 S1, Intel Xeon E5606, 2.13 GHz

**SPECint\_base2006 = 24.8**

**CPU2006 license:** 19

**Test sponsor:** Fujitsu

**Tested by:** Fujitsu

**Test date:** Feb-2011

**Hardware Availability:** Feb-2011

**Software Availability:** Jan-2011

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 v1.1.  
Report generated on Wed Jul 23 16:31:36 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 16 March 2011.