



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1270 v2, 3.50 GHz

SPECint®2006 = 56.9

SPECint\_base2006 = 53.6

CPU2006 license: 19

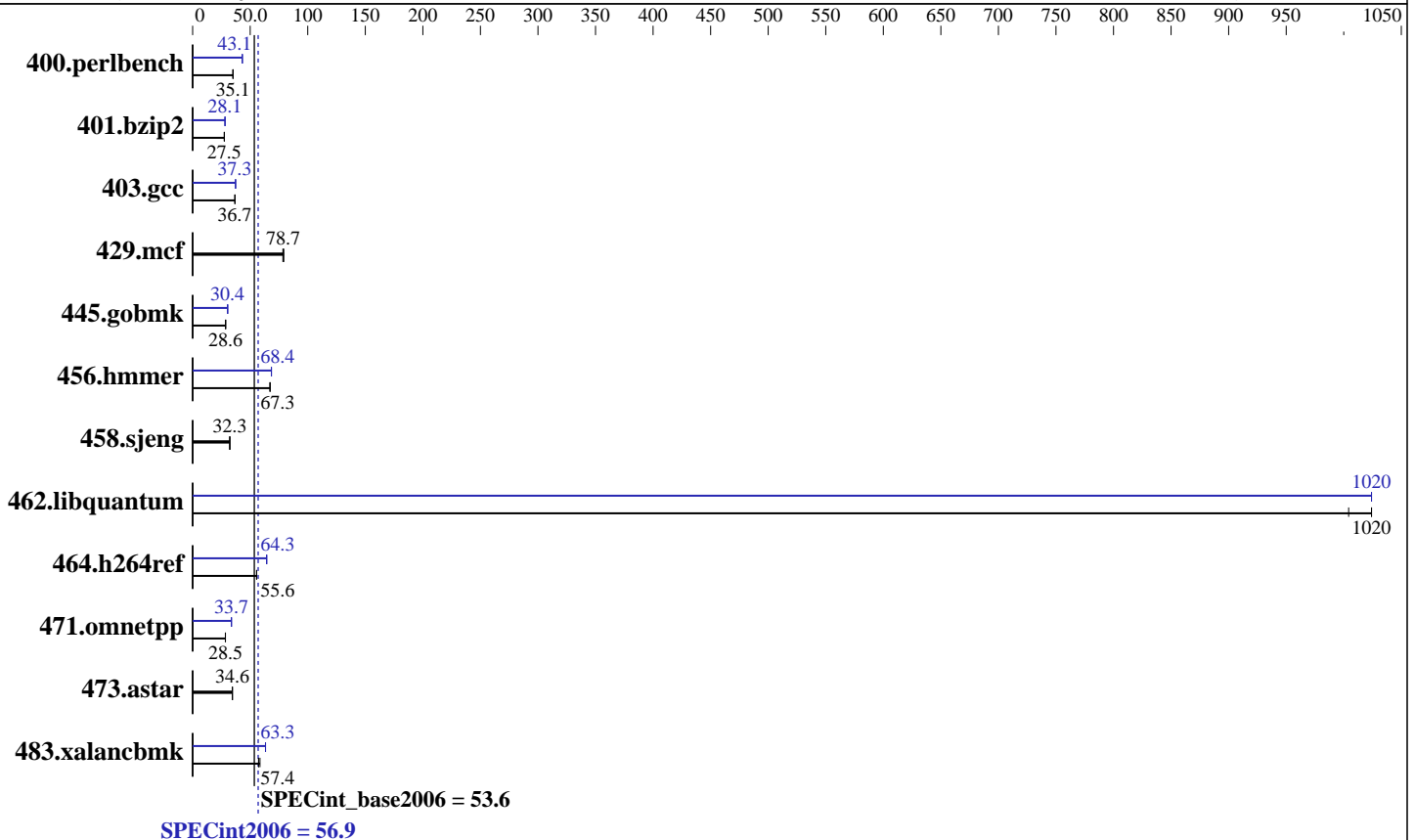
Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Apr-2012

Hardware Availability: May-2012

Software Availability: Feb-2012



### Hardware

CPU Name: Intel Xeon E3-1270 v2  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.9 GHz  
 CPU MHz: 3500  
 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: 256 KB I+D on chip per core  
 L3 Cache: 8 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 16 GB (2 x 8 GB 2Rx8 PC3-12800E-11, ECC)  
 Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM  
 Other Hardware: None

### Software

Operating System: Red Hat Enterprise Linux Server release 6.2 (Santiago)  
 2.6.32-220.el6.x86\_64  
 Compiler: C/C++: Version 12.1.0.293 of Intel C++ Studio XE for Linux  
 Auto Parallel: Yes  
 File System: ext4  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32/64-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V10.0



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1270 v2, 3.50 GHz

SPECint2006 = **56.9**

SPECint\_base2006 = **53.6**

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

Test date: Apr-2012  
Hardware Availability: May-2012  
Software Availability: Feb-2012

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	<b>278</b>	<b>35.1</b>	278	35.1	280	34.9	226	43.2	<b>226</b>	<b>43.1</b>	226	43.1
401.bzip2	<b>351</b>	<b>27.5</b>	350	27.5	351	27.5	343	28.1	<b>343</b>	<b>28.1</b>	343	28.1
403.gcc	219	36.8	219	36.7	<b>219</b>	<b>36.7</b>	216	37.3	<b>216</b>	<b>37.3</b>	216	37.2
429.mcf	115	79.2	<b>116</b>	<b>78.7</b>	116	78.4	115	79.2	<b>116</b>	<b>78.7</b>	116	78.4
445.gobmk	<b>366</b>	<b>28.6</b>	367	28.6	366	28.7	345	30.4	<b>345</b>	<b>30.4</b>	345	30.4
456.hammer	139	67.3	<b>139</b>	<b>67.3</b>	139	67.2	<b>136</b>	<b>68.4</b>	136	68.4	136	68.5
458.sjeng	375	32.3	<b>375</b>	<b>32.3</b>	375	32.3	375	32.3	<b>375</b>	<b>32.3</b>	375	32.3
462.libquantum	20.2	1020	<b>20.2</b>	<b>1020</b>	20.6	1000	<b>20.2</b>	<b>1020</b>	20.2	1020	20.2	1020
464.h264ref	<b>398</b>	<b>55.6</b>	399	55.5	398	55.6	344	64.3	344	64.3	<b>344</b>	<b>64.3</b>
471.omnetpp	<b>220</b>	<b>28.5</b>	219	28.5	220	28.4	<b>186</b>	<b>33.7</b>	185	33.8	186	33.6
473.astar	204	34.5	<b>203</b>	<b>34.6</b>	203	34.6	204	34.5	<b>203</b>	<b>34.6</b>	203	34.6
483.xalancbmk	<b>120</b>	<b>57.4</b>	121	57.2	118	58.5	109	63.3	109	63.3	<b>109</b>	<b>63.3</b>

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

## Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

## Platform Notes

BIOS configuration:  
Intel HT Technology = Disable

## General Notes

Environment variables set by runspec before the start of the run:

```
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64"
OMP_NUM_THREADS = "4"
```

Binaries compiled on a system with 1x E3-1270V2 CPU + 32 GB memory using RHEL6.2

Transparent Huge Pages enabled with:

```
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
```

This result was measured on the PRIMERGY TX140 S1p. The PRIMERGY tx140 S1p and the PRIMERGY TX120 S3p are electronically equivalent.

For information about Fujitsu please visit: <http://www.fujitsu.com>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

PRIMERGY TX140 S1p, Intel Xeon E3-1270 v2, 3.50 GHz

SPECint2006 = 56.9

SPECint\_base2006 = 53.6

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

Test date: Apr-2012  
Hardware Availability: May-2012  
Software Availability: Feb-2012

## Base Compiler Invocation

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

## 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  
  
C++ benchmarks:  
-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -auto-p32  
-Wl,-z,muldefs -L/opt/SmartHeap/lib64 -lsmartheap64

## Base Other Flags

C benchmarks:  
403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

C benchmarks (except as noted below):  
icc -m64

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

PRIMERGY TX140 S1p, Intel Xeon E3-1270 v2, 3.50 GHz

**SPECint2006 = 56.9**

**SPECint\_base2006 = 53.6**

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

**Test date:** Apr-2012  
**Hardware Availability:** May-2012  
**Software Availability:** Feb-2012

## Peak Compiler Invocation (Continued)

400.perlbench: `icc -m32`

445.gobmk: `icc -m32`

464.h264ref: `icc -m32`

C++ benchmarks (except as noted below):  
`icpc -m32`

473.astar: `icpc -m64`

## Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LINUX_IA32`

401.bzip2: `-DSPEC_CPU_LP64`

403.gcc: `-DSPEC_CPU_LP64`

429.mcf: `-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_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`

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: `-xAVX -ipo -O3 -no-prec-div -inline-calloc -opt-malloc-options=3 -auto-ilp32`

429.mcf: `basepeak = yes`

445.gobmk: `-xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -ansi-alias`

456.hmmer: `-xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32 -ansi-alias`

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S1p, Intel Xeon E3-1270 v2, 3.50 GHz

SPECint2006 = 56.9

SPECint\_base2006 = 53.6

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

Test date: Apr-2012  
Hardware Availability: May-2012  
Software Availability: Feb-2012

## Peak Optimization Flags (Continued)

458.sjeng: basepeak = yes

462.libquantum: -xAVX -ipo -O3 -no-prec-div -parallel -opt-prefetch  
-auto-p32

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

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/opt/SmartHeap/lib -lsmartheap

473.astar: basepeak = yes

483.xalancbmk: -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -ansi-alias  
-Wl,-z,muldefs -L/opt/SmartHeap/lib -lsmartheap

## 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-ic12.1-official-linux64.20111122.html>  
<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml>  
<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.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 v1.2.  
Report generated on Thu Jul 24 05:54:56 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 5 June 2012.