



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

SPECint®\_rate2006 = 353

PRIMERGY TX300 S7, Intel Xeon E5-2690, 2.90 GHz

SPECint\_rate\_base2006 = 339

CPU2006 license: 19

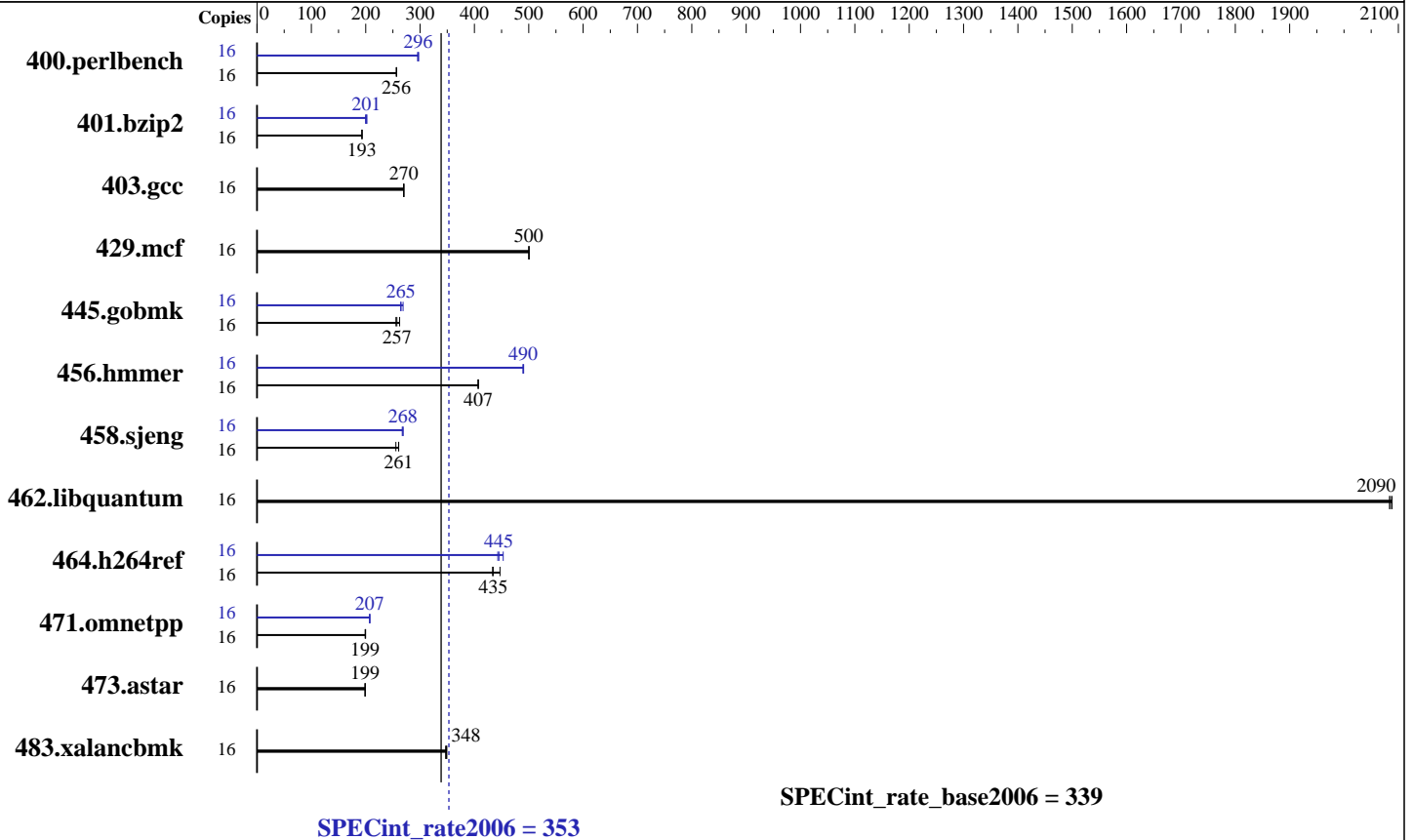
Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Dec-2011

Hardware Availability: Mar-2012

Software Availability: Dec-2011



### Hardware

CPU Name: Intel Xeon E5-2690  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.80 GHz  
 CPU MHz: 2900  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 1 chip, 8 cores/chip, 2 threads/core  
 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: 20 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 64 GB (8 x 8 GB 2Rx4 PC3L-12800R-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 12.1.0.225 of Intel C++ Studio XE for Linux  
 Auto Parallel: No  
 File System: ext4  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V9.01



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

SPECint\_rate2006 = 353

PRIMERGY TX300 S7, Intel Xeon E5-2690, 2.90 GHz

SPECint\_rate\_base2006 = 339

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

Test date: Dec-2011  
Hardware Availability: Mar-2012  
Software Availability: Dec-2011

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	16	<b>610</b>	<b>256</b>	610	256	608	257	16	525	297	<b>527</b>	<b>296</b>	529	296
401.bzip2	16	<b>799</b>	<b>193</b>	798	193	800	193	16	764	202	773	200	<b>766</b>	<b>201</b>
403.gcc	16	<b>477</b>	<b>270</b>	476	270	478	270	16	<b>477</b>	<b>270</b>	476	270	478	270
429.mcf	16	<b>292</b>	<b>500</b>	292	500	291	501	16	<b>292</b>	<b>500</b>	292	500	291	501
445.gobmk	16	657	256	640	262	<b>652</b>	<b>257</b>	16	635	264	624	269	<b>633</b>	<b>265</b>
456.hammer	16	<b>367</b>	<b>407</b>	367	407	367	407	16	304	491	<b>305</b>	<b>490</b>	305	490
458.sjeng	16	758	256	<b>743</b>	<b>261</b>	743	261	16	725	267	720	269	<b>721</b>	<b>268</b>
462.libquantum	16	<b>159</b>	<b>2090</b>	159	2090	159	2080	16	<b>159</b>	<b>2090</b>	159	2090	159	2080
464.h264ref	16	792	447	817	433	<b>815</b>	<b>435</b>	16	799	443	<b>795</b>	<b>445</b>	782	453
471.omnetpp	16	500	200	<b>502</b>	<b>199</b>	502	199	16	482	208	483	207	<b>482</b>	<b>207</b>
473.astar	16	564	199	<b>565</b>	<b>199</b>	565	199	16	564	199	<b>565</b>	<b>199</b>	565	199
483.xalancbmk	16	318	347	316	349	<b>317</b>	<b>348</b>	16	318	347	316	349	<b>317</b>	<b>348</b>

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

## Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

## Operating System Notes

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

## General Notes

Environment variables set by runspec before the start of the run:  
LD\_LIBRARY\_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RHEL5.5

Transparent Huge Pages enabled with:

echo always > /sys/kernel/mm/redhat\_transparent\_hugepage/enabled

runspec command invoked through numactl i.e.:

numactl --interleave=all runspec <etc>

This result was measured on the PRIMERGY RX350 S7. The PRIMERGY RX350 S7 and the PRIMERGY TX300 S7 are electronically equivalent.

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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint\_rate2006 = 353

PRIMERGY TX300 S7, Intel Xeon E5-2690, 2.90 GHz

SPECint\_rate\_base2006 = 339

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

Test date: Dec-2011  
Hardware Availability: Mar-2012  
Software Availability: Dec-2011

## Base Compiler Invocation

C benchmarks:  
icc -m32  
  
C++ benchmarks:  
icpc -m32

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
462.libquantum: -DSPEC\_CPU\_LINUX  
483.xalancbmk: -DSPEC\_CPU\_LINUX

## Base Optimization Flags

C benchmarks:  
-xAVX -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3  
  
C++ benchmarks:  
-xAVX -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3  
-Wl,-z,muldefs -L/smartheap -lsmartheap

## Base Other Flags

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

## Peak Compiler Invocation

C benchmarks (except as noted below):  
icc -m32  
  
400.perlbench: icc -m64  
401.bzip2: icc -m64  
456.hmmer: icc -m64  
458.sjeng: icc -m64  
  
C++ benchmarks:  
icpc -m32



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint\_rate2006 = 353

PRIMERGY TX300 S7, Intel Xeon E5-2690, 2.90 GHz

SPECint\_rate\_base2006 = 339

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Dec-2011

Hardware Availability: Mar-2012

Software Availability: Dec-2011

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX\_X64  
 401.bzip2: -DSPEC\_CPU\_LP64  
 456.hmmer: -DSPEC\_CPU\_LP64  
 458.sjeng: -DSPEC\_CPU\_LP64  
 462.libquantum: -DSPEC\_CPU\_LINUX  
 483.xalanbmk: -DSPEC\_CPU\_LINUX

## Peak Optimization Flags

C benchmarks:

400.perlbench: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
 -no-prec-div(pass 2) -prof-use(pass 2) -auto-ilp32

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

403.gcc: basepeak = yes

429.mcf: basepeak = yes

445.gobmk: -xAVX(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
 -ansi-alias -opt-mem-layout-trans=3

456.hmmer: -xAVX -ipo -O3 -no-prec-div -unroll2 -auto-ilp32

458.sjeng: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
 -no-prec-div(pass 2) -prof-use(pass 2) -unroll4  
 -auto-ilp32

462.libquantum: basepeak = yes

464.h264ref: -xAVX(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: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
 -no-prec-div(pass 2) -prof-use(pass 2) -ansi-alias  
 -opt-ra-region-strategy=block -Wl,-z,muldefs  
 -L/smartheap -lsmartheap

473.astar: basepeak = yes

483.xalanbmk: basepeak = yes



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECint\_rate2006 = 353**

PRIMERGY TX300 S7, Intel Xeon E5-2690, 2.90 GHz

**SPECint\_rate\_base2006 = 339**

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

**Test date:** Dec-2011  
**Hardware Availability:** Mar-2012  
**Software Availability:** Dec-2011

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

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

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.xml>  
<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.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 07:14:46 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 10 April 2012.