



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

SPECint®\_rate2006 = 650

Servidor Itautec MX215 (Intel Xeon E5-2670)

SPECint\_rate\_base2006 = 627

CPU2006 license: 9001

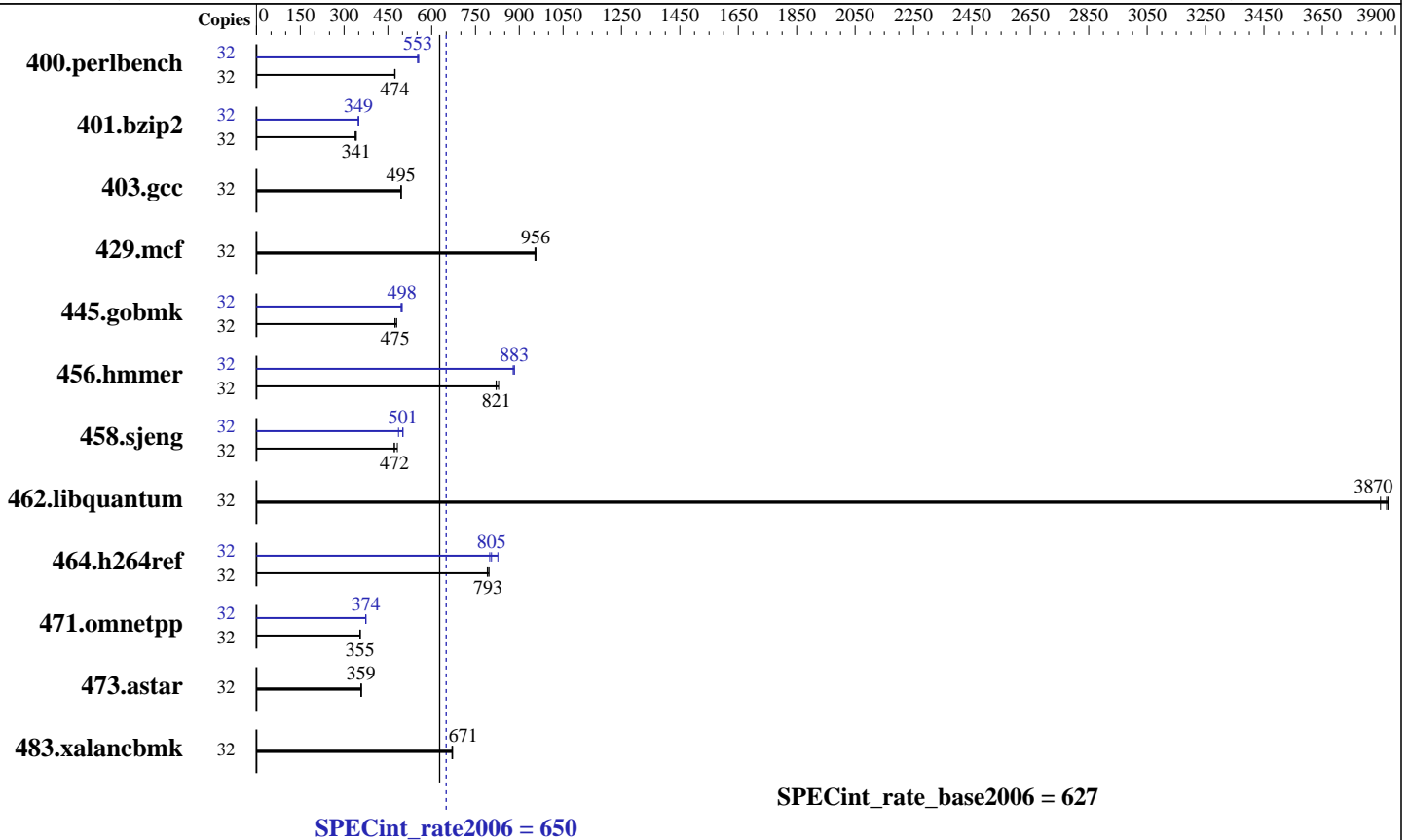
Test date: Apr-2013

Test sponsor: Itautec

Hardware Availability: Jun-2012

Tested by: Itautec

Software Availability: Jan-2013



## Hardware

CPU Name: Intel Xeon E5-2670  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.30 GHz  
 CPU MHz: 2600  
 FPU: Integrated  
 CPU(s) enabled: 16 cores, 2 chips, 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: 128 GB (16 x 8 GB 2Rx4 PC3-12800R-11, ECC)  
 Disk Subsystem: 500 GB, SATA-3, 7200 RPM  
 Other Hardware: None

## Software

Operating System: Red Hat Enterprise Linux Server Release 6.3, 2.6.32-279.el6.x86\_64  
 Compiler: C/C++: Version 13.1.0.146 of Intel Compiler XE Build 20130121  
 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 V8.1



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECint\_rate2006 = 650

Servidor Itaotec MX215 (Intel Xeon E5-2670)

SPECint\_rate\_base2006 = 627

CPU2006 license: 9001  
Test sponsor: Itaotec  
Tested by: Itaotec

Test date: Apr-2013  
Hardware Availability: Jun-2012  
Software Availability: Jan-2013

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	32	659	474	661	473	<b>659</b>	<b>474</b>	32	<b>566</b>	<b>553</b>	566	552	563	556
401.bzip2	32	905	341	915	338	<b>905</b>	<b>341</b>	32	883	350	<b>884</b>	<b>349</b>	886	349
403.gcc	32	519	496	521	494	<b>520</b>	<b>495</b>	32	519	496	521	494	<b>520</b>	<b>495</b>
429.mcf	32	305	957	<b>305</b>	<b>956</b>	306	954	32	305	957	<b>305</b>	<b>956</b>	306	954
445.gobmk	32	708	474	699	480	<b>706</b>	<b>475</b>	32	<b>674</b>	<b>498</b>	678	495	674	498
456.hammer	32	360	829	<b>364</b>	<b>821</b>	364	821	32	<b>338</b>	<b>883</b>	340	879	338	883
458.sjeng	32	821	472	<b>820</b>	<b>472</b>	803	482	32	796	486	772	502	<b>773</b>	<b>501</b>
462.libquantum	32	172	3850	<b>171</b>	<b>3870</b>	171	3870	32	172	3850	<b>171</b>	<b>3870</b>	171	3870
464.h264ref	32	<b>894</b>	<b>793</b>	889	796	896	790	32	857	827	<b>880</b>	<b>805</b>	887	799
471.omnetpp	32	<b>563</b>	<b>355</b>	565	354	563	355	32	<b>534</b>	<b>374</b>	534	375	535	374
473.astar	32	<b>626</b>	<b>359</b>	628	358	625	359	32	<b>626</b>	<b>359</b>	628	358	625	359
483.xalancbmk	32	329	671	330	669	<b>329</b>	<b>671</b>	32	329	671	330	669	<b>329</b>	<b>671</b>

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

## Submit Notes

The config file option 'submit' was used.  
numactl was used to bind copies to the cores

## Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run.  
Large pages were not enabled for this run

## Platform Notes

Sysinfo program /home/rcaneca/cpu2006/Docs/sysinfo  
\$Rev: 6775 \$ \$Date:: 2011-08-16 #\$ 8787f7622badcf24e01c368b1db4377c  
running on mx225 Sat Apr 20 05:03:00 2013

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:  
<http://www.spec.org/cpu2006/Docs/config.html#sysinfo>

From /proc/cpuinfo  
model name : Genuine Intel(R) CPU @ 2.60GHz  
2 "physical id"s (chips)  
32 "processors"  
cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)  
cpu cores : 8  
siblings : 16

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

SPECint\_rate2006 = 650

Servidor Itautec MX215 (Intel Xeon E5-2670)

SPECint\_rate\_base2006 = 627

CPU2006 license: 9001  
Test sponsor: Itautec  
Tested by: Itautec

Test date: Apr-2013  
Hardware Availability: Jun-2012  
Software Availability: Jan-2013

## Platform Notes (Continued)

```
physical 0: cores 0 1 2 3 4 5 6 7
physical 1: cores 0 1 2 3 4 5 6 7
cache size : 20480 KB
```

```
From /proc/meminfo
MemTotal:      132104788 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.3 (Santiago)
```

```
From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server
```

```
uname -a:
Linux mx225 2.6.32-279.el6.x86_64 #1 SMP Wed Jun 13 18:24:36 EDT 2012 x86_64
x86_64 x86_64 GNU/Linux
```

```
run-level 3 Apr 19 17:01
```

```
SPEC is set to: /home/rcaneca/cpu2006
Filesystem      Type      Size Used Avail Use% Mounted on
/dev/mapper/vg_mx225-lv_home
                ext4      404G  3.8G  380G   1% /home
```

(End of data from sysinfo program)

## General Notes

This result was measured on the Servidor Itautec MX225.  
The Servidor Itautec MX215 and the Servidor Itautec MX225  
are electronically equivalent.

```
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>
```

```
Filesystem page cache cleared with:
echo 1 > /proc/sys/vm/drop_caches
Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
Filesystem page cache cleared with:
echo 1> /proc/sys/vm/drop_caches
```



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECint\_rate2006 = 650

Servidor Itaotec MX215 (Intel Xeon E5-2670)

SPECint\_rate\_base2006 = 627

CPU2006 license: 9001  
Test sponsor: Itaotec  
Tested by: Itaotec

Test date: Apr-2013  
Hardware Availability: Jun-2012  
Software Availability: Jan-2013

## 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:  
-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3  
  
C++ benchmarks:  
-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3  
-Wl,-z,muldefs -L/home/rcaneca/sh/SmartHeap\_8.1/lib -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

Itaotec

SPECint\_rate2006 = 650

Servidor Itaotec MX215 (Intel Xeon E5-2670)

SPECint\_rate\_base2006 = 627

CPU2006 license: 9001  
Test sponsor: Itaotec  
Tested by: Itaotec

Test date: Apr-2013  
Hardware Availability: Jun-2012  
Software Availability: Jan-2013

## 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.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)  
-auto-ilp32  
401.bzip2: -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 -auto-ilp32 -ansi-alias  
403.gcc: basepeak = yes  
429.mcf: basepeak = yes  
445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
-ansi-alias -opt-mem-layout-trans=3  
456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32  
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 -auto-ilp32  
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

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)  
-ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs  
-L/home/rcaneca/sh/SmartHeap\_8.1/lib -lsmarheap  
473.astar: basepeak = yes

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

SPECint\_rate2006 = 650

Servidor Itautec MX215 (Intel Xeon E5-2670)

SPECint\_rate\_base2006 = 627

CPU2006 license: 9001

Test date: Apr-2013

Test sponsor: Itautec

Hardware Availability: Jun-2012

Tested by: Itautec

Software Availability: Jan-2013

## Peak Optimization Flags (Continued)

483.xalanbmk: 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/Itautec-Servidor\\_Itautec-Intel-Linux-Platform.20130507.html](http://www.spec.org/cpu2006/flags/Itautec-Servidor_Itautec-Intel-Linux-Platform.20130507.html)

<http://www.spec.org/cpu2006/flags/Intel-ic13-official-linux64.html>

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

[http://www.spec.org/cpu2006/flags/Itautec-Servidor\\_Itautec-Intel-Linux-Platform.20130507.xml](http://www.spec.org/cpu2006/flags/Itautec-Servidor_Itautec-Intel-Linux-Platform.20130507.xml)

<http://www.spec.org/cpu2006/flags/Intel-ic13-official-linux64.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 15:32:27 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 7 May 2013.