# SPEC® CINT2006 Result



## Itautec

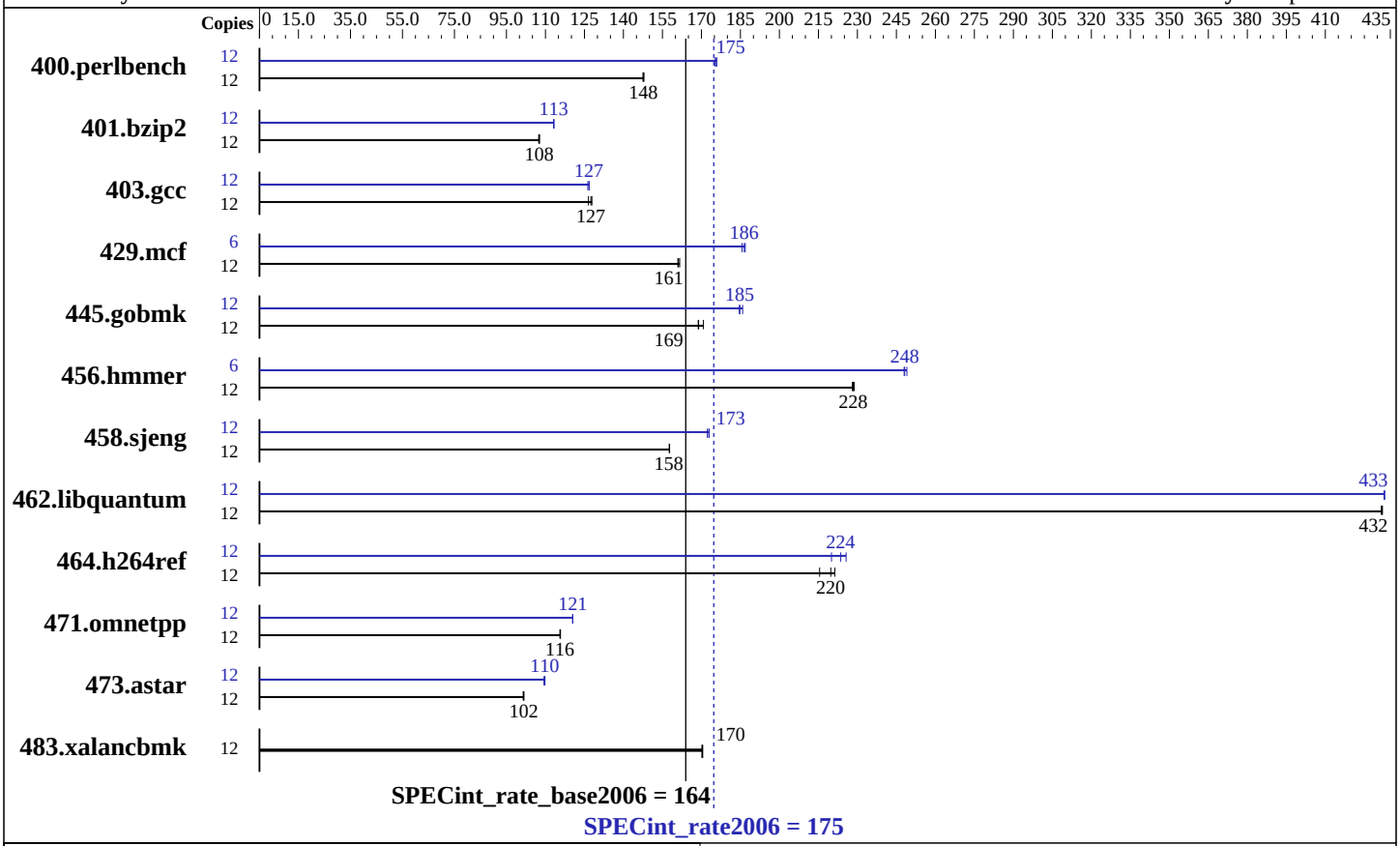
## Servidor Itautec MX203 (Intel Xeon X5650)

SPECint®_rate2006 = 175

SPECint_rate_base2006 = 164

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

**Test date:** May-2010
**Hardware Availability:** Apr-2010
**Software Availability:** Apr-2010




### Hardware

| | |
|---|---|
| CPU Name: | Intel Xeon X5650 |
| CPU Characteristics: | Intel Turbo Boost Technology up to 3.06 GHz |
| CPU MHz: | 2667 |
| FPU: | Integrated |
| CPU(s) enabled: | 6 cores, 1 chip, 6 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: | 12 MB I+D on chip per chip |
| Other Cache: | None |
| Memory: | 24 GB (6 x 4GB, DDR3-1333, Dual Rank, CL 9, ECC) |
| Disk Subsystem: | 1 x 160 GB SATA-2, 7200 RPM |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | SUSE Linux Enterprise Server 11 (x86_64), Kernel 2.6.27.19-5-smp |
| Compiler: | Intel C++ Professional Compiler 11.1 for Linux Build 20100414 Package ID: l_cproc_p_11.1.072 |
| Auto Parallel: | No |
| File System: | ReiserFS |
| 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



## Itautec

## Servidor Itautec MX203 (Intel Xeon X5650)

SPECint_rate2006 = 175

SPECint_rate_base2006 = 164

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

**Test date:** May-2010
**Hardware Availability:** Apr-2010
**Software Availability:** Apr-2010

## Results Table

| Benchmark | Base | | | | | | | Peak | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 400.perlbench | 12 | 793 | 148 | 795 | 148 | **794** | **148** | 12 | 666 | 176 | **668** | **175** | 669 | 175 |
| 401.bzip2 | 12 | **1076** | **108** | 1075 | 108 | 1078 | 107 | 12 | 1022 | 113 | 1023 | 113 | **1023** | **113** |
| 403.gcc | 12 | 755 | 128 | 763 | 127 | **758** | **127** | 12 | 762 | 127 | **762** | **127** | 765 | 126 |
| 429.mcf | 12 | 680 | 161 | 677 | 162 | **679** | **161** | 6 | **293** | **186** | 293 | 187 | 295 | 186 |
| 445.gobmk | 12 | **745** | **169** | 746 | 169 | 737 | 171 | 12 | 677 | 186 | **681** | **185** | 682 | 185 |
| 456.hmmer | 12 | 491 | 228 | 489 | 229 | **490** | **228** | 6 | 226 | 248 | **226** | **248** | 225 | 249 |
| 458.sjeng | 12 | **921** | **158** | 920 | 158 | 921 | 158 | 12 | **840** | **173** | 843 | 172 | 840 | 173 |
| 462.libquantum | 12 | **576** | **432** | 576 | 432 | 576 | 432 | 12 | **575** | **433** | 575 | 433 | 574 | 433 |
| 464.h264ref | 12 | 1232 | 215 | 1200 | 221 | **1208** | **220** | 12 | **1188** | **224** | 1177 | 226 | 1207 | 220 |
| 471.omnetpp | 12 | 649 | 116 | 648 | 116 | **649** | **116** | 12 | 622 | 121 | **622** | **121** | 623 | 120 |
| 473.astar | 12 | 830 | 101 | 828 | 102 | **829** | **102** | 12 | 767 | 110 | **768** | **110** | 770 | 109 |
| 483.xalancbmk | 12 | 486 | 170 | 487 | 170 | **486** | **170** | 12 | 486 | 170 | 487 | 170 | **486** | **170** |

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.
```

## General Notes

```
This result was measured on the Servidor Itautec MX223.
The Servidor Itautec MX223 and the Servidor Itautec MX203 are electronically equivalent.
```

# 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 -static -opt-prefetch`

C++ benchmarks:
`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs`
`-L/opt/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`

401.bzip2: `icc -m64`

456.hmmer: `icc -m64`

458.sjeng: `icc -m64`

462.libquantum: `icc -m64`

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`

Continued on next page

## Peak Portability Flags (Continued)

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) -static(pass 2)
-prof-use(pass 2) -ansi-alias

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

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -static

429.mcf: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2
-ipo -no-prec-div -ansi-alias

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

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
-prof-use(pass 2) -unroll4 -auto-ilp32

462.libquantum: -xSSE4.2 -ipo -O3 -no-prec-div -static -auto-ilp32
-opt-prefetch

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -static(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/opt/sh/SmartHeap_8.1/lib -lsmartheap

473.astar: -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=routine -Wl,-z,muldefs

Continued on next page

## Peak Optimization Flags (Continued)

473.astar (continued):
`-L/opt/sh/SmartHeap_8.1/lib -lsmartheap64`

483.xalancbmk: `basepeak = yes`

## Peak Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/Itautec-Intel-ic11.1-linux64-revE.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Itautec-Intel-ic11.1-linux64-revE.xml`



For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.1.
Report generated on Wed Jul 23 09:28:44 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 25 May 2010.