



SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

HITACHI

SPECint®_rate2006 = Not Run

BladeSymphony BS520X (Intel Xeon E7-8890 v3)

SPECint_rate_base2006 = 2740

CPU2006 license: 35

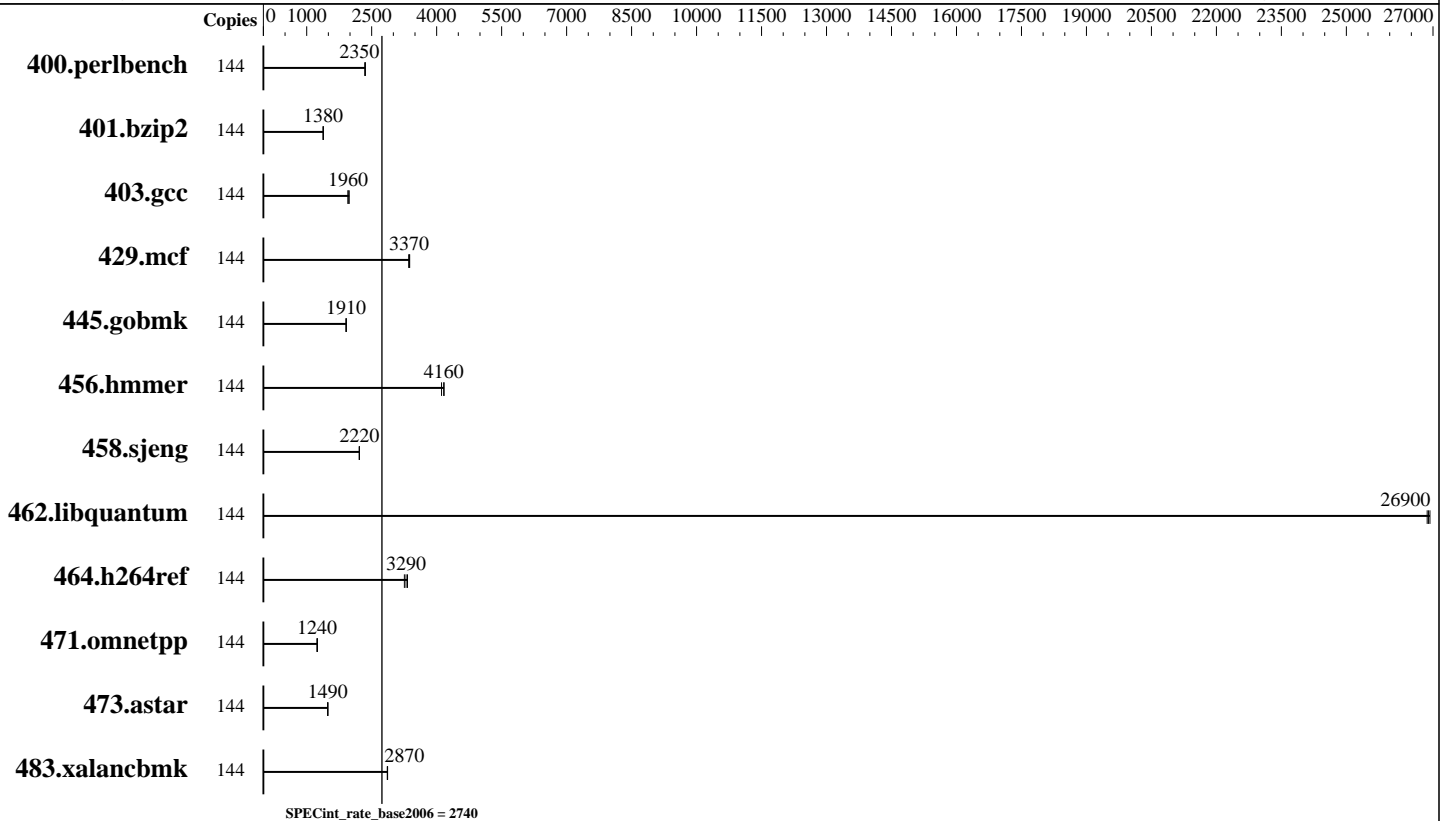
Test date: May-2015

Test sponsor: HITACHI

Hardware Availability: Jun-2015

Tested by: HITACHI

Software Availability: Oct-2014



Hardware

CPU Name: Intel Xeon E7-8890 v3
 CPU Characteristics: Intel Turbo Boost Technology up to 3.30 GHz
 CPU MHz: 2500
 FPU: Integrated
 CPU(s) enabled: 72 cores, 4 chips, 18 cores/chip, 2 threads/core
 CPU(s) orderable: 2,4 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: 45 MB I+D on chip per chip
 Other Cache: None
 Memory: 1 TB (64 x 16 GB 2Rx4 PC4-2133P-R, running at 1600 MHz)
 Disk Subsystem: 2 x 300 GB SAS, 15000 RPM, RAID1
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.6 (Santiago)
 2.6.32-504.el6.x86_64
 Compiler: C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux
 Auto Parallel: No
 File System: ext4
 System State: Run level 5
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: Microquill SmartHeap V10.0



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

HITACHI

SPECint_rate2006 = Not Run

BladeSymphony BS520X (Intel Xeon E7-8890 v3)

SPECint_rate_base2006 = 2740

CPU2006 license: 35

Test date: May-2015

Test sponsor: HITACHI

Hardware Availability: Jun-2015

Tested by: HITACHI

Software Availability: Oct-2014

Results Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
400.perlbench	144	600	2340	598	2350	<u>599</u>	<u>2350</u>									
401.bzip2	144	1006	1380	<u>1006</u>	<u>1380</u>	1006	1380									
403.gcc	144	594	1950	585	1980	<u>592</u>	<u>1960</u>									
429.mcf	144	<u>390</u>	<u>3370</u>	389	3380	391	3360									
445.gobmk	144	791	1910	<u>790</u>	<u>1910</u>	790	1910									
456.hammer	144	322	4170	<u>323</u>	<u>4160</u>	327	4110									
458.sjeng	144	788	2210	785	2220	<u>786</u>	<u>2220</u>									
462.libquantum	144	<u>111</u>	<u>26900</u>	111	26900	111	26900									
464.h264ref	144	<u>968</u>	<u>3290</u>	979	3250	958	3330									
471.omnetpp	144	726	1240	721	1250	<u>726</u>	<u>1240</u>									
473.astar	144	680	1490	<u>680</u>	<u>1490</u>	680	1490									
483.xalancbmk	144	<u>347</u>	<u>2870</u>	347	2870	347	2860									

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"

Platform Notes

BIOS configuration:

C-State = Disable
C1 Enhanced Mode = Disable
Active Energy Manager = Capping Disabled
Platform Controlled Type = Maximum Performance
Memory Power Management = Disable
Patrol Scrub = Disable

Sysinfo program /home/cpu2006/config/sysinfo.rev6818
\$Rev: 6818 \$ \$Date:: 2012-07-17 #\$ e86d102572650a6e4d596a3cee98f191
running on localhost Wed May 13 17:11:30 2015

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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

HITACHI

SPECint_rate2006 = Not Run

BladeSymphony BS520X (Intel Xeon E7-8890 v3)

SPECint_rate_base2006 = 2740

CPU2006 license: 35

Test sponsor: HITACHI

Tested by: HITACHI

Test date: May-2015

Hardware Availability: Jun-2015

Software Availability: Oct-2014

Platform Notes (Continued)

```

model name : Intel(R) Xeon(R) CPU E7-8890 v3 @ 2.50GHz
 4 "physical id"s (chips)
144 "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 : 18
  siblings  : 36
 physical 0: cores 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
 physical 1: cores 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
 physical 2: cores 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
 physical 3: cores 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
cache size : 46080 KB

```

```

From /proc/meminfo
MemTotal:      1058391176 kB
HugePages_Total:       0
Hugepagesize:    2048 kB

```

```

/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.6 (Santiago)

```

```

From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.6 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.6 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

```

```

uname -a:
Linux localhost 2.6.32-504.el6.x86_64 #1 SMP Tue Sep 16 01:56:35 EDT 2014
x86_64 x86_64 x86_64 GNU/Linux

```

run-level 5 May 13 16:10

```

SPEC is set to: /home/cpu2006
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/mapper/vg_rhel6-lv_home
                ext4  221G  4.9G  205G   3% /home

```

```

Additional information from dmidecode:
BIOS HITACHI 09-07 04/28/2015
Memory:
 32x NO DIMM Unknown
 64x Samsung M393A2G40DB0-CPB 16 GB 1600 MHz 2 rank

```

(End of data from sysinfo program)

General Notes

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/home/cpu2006/libs/32:/home/cpu2006/libs/64:/home/cpu2006/sh"

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

HITACHI

SPECint_rate2006 = Not Run

BladeSymphony BS520X (Intel Xeon E7-8890 v3)

SPECint_rate_base2006 = 2740

CPU2006 license: 35

Test sponsor: HITACHI

Tested by: HITACHI

Test date: May-2015

Hardware Availability: Jun-2015

Software Availability: Oct-2014

General Notes (Continued)

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RedHat EL 6.4
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
Filesystem page cache cleared with:
echo 1> /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>
BladeSymphony BS520X, BladeSymphony BS2500 and Hitachi Compute Blade 520X are electronically equivalent.
The results have been measured on a Hitachi Compute Blade 520X.

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:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-opt-mem-layout-trans=3

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-opt-mem-layout-trans=3 -Wl,-z,muldefs -L/sh -lsmartheap

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

HITACHI

SPECint_rate2006 = Not Run

BladeSymphony BS520X (Intel Xeon E7-8890 v3)

SPECint_rate_base2006 = 2740

CPU2006 license: 35

Test sponsor: HITACHI

Tested by: HITACHI

Test date: May-2015

Hardware Availability: Jun-2015

Software Availability: Oct-2014

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

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64-revC.html>

<http://www.spec.org/cpu2006/flags/PlatformHitachi-V1.2.20150602.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64-revC.xml>

<http://www.spec.org/cpu2006/flags/PlatformHitachi-V1.2.20150602.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.

Tested with SPEC CPU2006 v1.2.
Report generated on Tue Jun 2 13:47:04 2015 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 June 2015.