SPEC® CINT2006 Result

HITACHI

HA8000-bd (Intel Xeon E3-1275L v3)

SPECint®_rate2006 = 202

SPECint_rate_base2006 = 195

CPU2006 license: 35	**Test date:** Sep-2014
Test sponsor: HITACHI	**Hardware Availability:** Oct-2014
Tested by: HITACHI	**Software Availability:** Feb-2013

SPECint_rate_base2006 = 195

SPECint_rate2006 = 202

Hardware

CPU Name:	Intel Xeon E3-1275L v3
CPU Characteristics:	Intel Turbo Boost Technology up to 3.90 GHz
CPU MHz:	2700
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 cores/chip, 2 threads/core
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:	32 GB (4 x 8 GB 2Rx8 PC3-12800E-11, ECC)
Disk Subsystem:	3 x 1000 GB SATA, 7200RPM
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux Server release 6.4 (Santiago) 2.6.32-358.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 3 (multi-user)
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	Microquill SmartHeap V10.0

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

HITACHI

HA8000-bd (Intel Xeon E3-1275L v3)

SPECint_rate2006 = 202
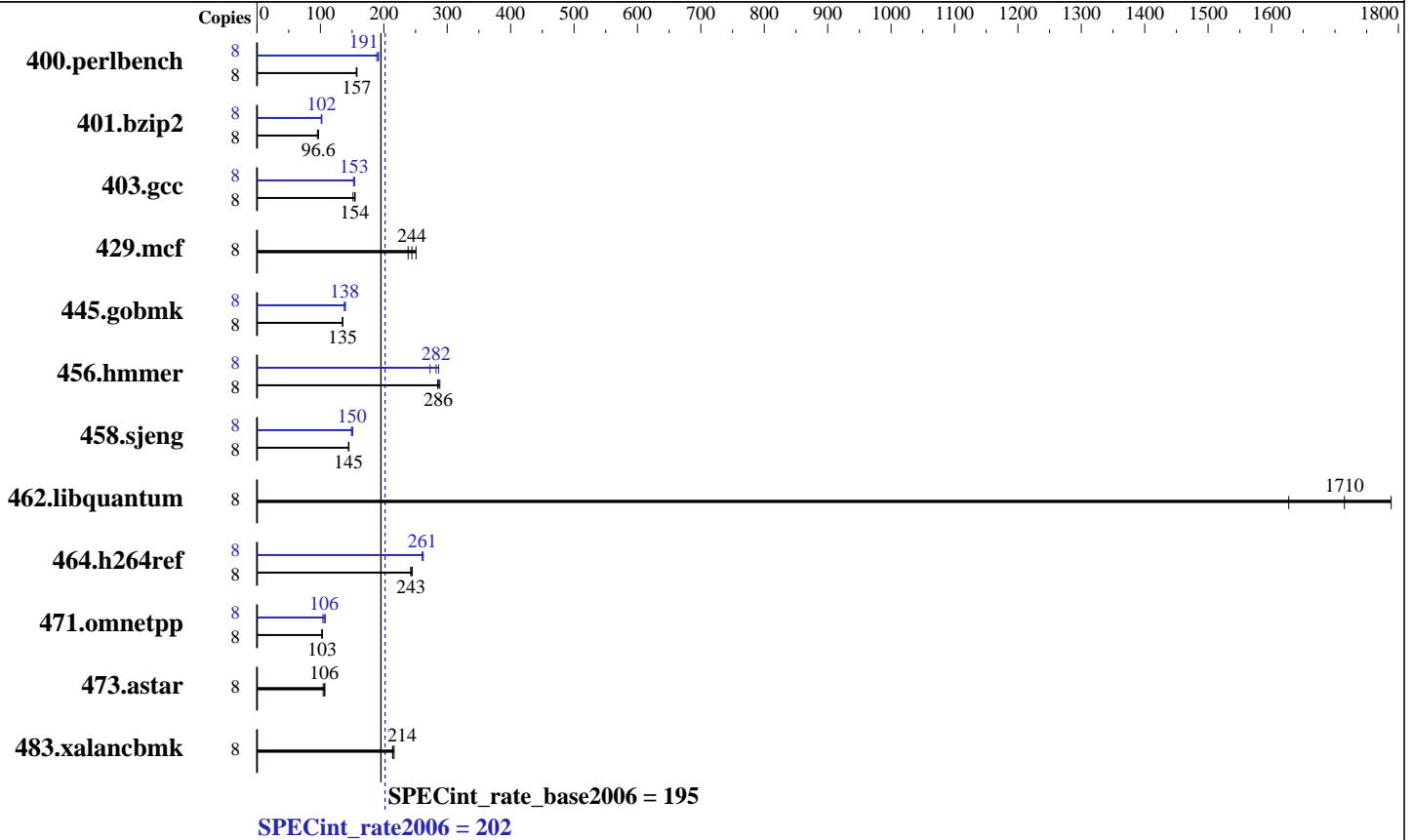
SPECint_rate_base2006 = 195

CPU2006 license: 35
Test sponsor: HITACHI
Tested by: HITACHI

Test date: Sep-2014
Hardware Availability: Oct-2014
Software Availability: Feb-2013

Results Table

Benchmark	Copies	Base Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Peak Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	499	157	496	158	**497**	**157**	8	**409**	**191**	414	189	408	192
401.bzip2	8	811	95.2	795	97.1	**799**	**96.6**	8	**757**	**102**	762	101	756	102
403.gcc	8	**418**	**154**	425	151	416	155	8	**420**	**153**	418	154	423	152
429.mcf	8	291	251	**299**	**244**	306	238	8	291	251	**299**	**244**	306	238
445.gobmk	8	**622**	**135**	621	135	622	135	8	601	140	609	138	**608**	**138**
456.hmmer	8	**261**	**286**	259	288	262	285	8	**264**	**282**	261	287	274	273
458.sjeng	8	**670**	**145**	667	145	670	144	8	**646**	**150**	641	151	650	149
462.libquantum	8	**96.7**	**1710**	92.7	1790	102	1630	8	**96.7**	**1710**	92.7	1790	102	1630
464.h264ref	8	723	245	730	242	**729**	**243**	8	675	262	**678**	**261**	680	260
471.omnetpp	8	486	103	**486**	**103**	488	102	8	464	108	481	104	**472**	**106**
473.astar	8	**529**	**106**	538	104	524	107	8	**529**	**106**	538	104	524	107
483.xalancbmk	8	**258**	**214**	258	214	255	216	8	**258**	**214**	258	214	255	216

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

Submit Notes

```
The taskset mechanism was used to bind copies to processors. The config file option 'submit'
was used to generate taskset 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

```
Sysinfo program /home/cpu2006/cpu2006/config/sysinfo.rev6818
$Rev: 6818 $ $Date:: 2012-07-17 #$ e86d102572650a6e4d596a3cee98f191
running on localhost.localdomain Mon Sep  8 20:00:56 2014

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 : Intel(R) Xeon(R) CPU E3-1275L v3 @ 2.70GHz
      1 "physical id"s (chips)
      8 "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 : 4
      siblings  : 8
```

HITACHI

HA8000-bd (Intel Xeon E3-1275L v3)

SPECint_rate2006 =   202

SPECint_rate_base2006 = 195

CPU2006 license: 35
Test sponsor: HITACHI
Tested by: HITACHI

Test date: Sep-2014
Hardware Availability: Oct-2014
Software Availability: Feb-2013

Platform Notes (Continued)

```
      physical 0: cores 0 1 2 3
   cache size : 8192 KB

 From /proc/meminfo
    MemTotal:        32958224 kB
    HugePages_Total:        0
    Hugepagesize:        2048 kB

 /usr/bin/lsb_release -d
    Red Hat Enterprise Linux Server release 6.4 (Santiago)

 From /etc/*release* /etc/*version*
    redhat-release: Red Hat Enterprise Linux Server release 6.4 (Santiago)
    system-release: Red Hat Enterprise Linux Server release 6.4 (Santiago)
    system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

 uname -a:
    Linux localhost.localdomain 2.6.32-358.el6.x86_64 #1 SMP Tue Jan 29 11:47:41
    EST 2013 x86_64 x86_64 x86_64 GNU/Linux

 run-level 3 Sep 8 19:58

 SPEC is set to: /home/cpu2006/cpu2006
    Filesystem      Type    Size  Used Avail Use% Mounted on
    /dev/mapper/VolGroup-lv_home
                    ext4    172G  5.0G  159G   4% /home

 Additional information from dmidecode:
   BIOS American Megatrends Inc. P2_03 09/04/2014
   Memory:
    4x    8 GB
    4x 1323 SMD3L-N8G28HA-16K 8 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/cpu2006/libs/32:/home/cpu2006/cpu2006/libs/64:/home/cpu2006/cpu2006/sh"


  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
```

Base Compiler Invocation

C benchmarks:
```
      icc  -m32
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

HITACHI

HA8000-bd (Intel Xeon E3-1275L v3)

SPECint_rate2006 =   202

SPECint_rate_base2006 = 195

CPU2006 license: 35
Test sponsor: HITACHI
Tested by: HITACHI

Test date: Sep-2014
Hardware Availability: Oct-2014
Software Availability: Feb-2013

Base Compiler Invocation (Continued)

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

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

HITACHI

HA8000-bd (Intel Xeon E3-1275L v3)

SPECint_rate2006 = 202

SPECint_rate_base2006 = 195

CPU2006 license: 35
Test sponsor: HITACHI
Tested by: HITACHI

Test date: Sep-2014
Hardware Availability: Oct-2014
Software Availability: Feb-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: -xCORE-AVX2(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: -xCORE-AVX2(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: -xCORE-AVX2 -ipo -O3 -no-prec-div

         429.mcf: basepeak = yes

       445.gobmk: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
                  -ansi-alias -opt-mem-layout-trans=3

      456.hmmer: -xCORE-AVX2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32

       458.sjeng: -xCORE-AVX2(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: -xCORE-AVX2(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: -xCORE-AVX2(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/sh -lsmartheap

       473.astar: basepeak = yes
```

HITACHI

HA8000-bd (Intel Xeon E3-1275L v3)

SPECint_rate2006 =   202

SPECint_rate_base2006 = 195

CPU2006 license: 35
Test sponsor: HITACHI
Tested by: HITACHI

Test date: Sep-2014
Hardware Availability: Oct-2014
Software Availability: Feb-2013

Peak Optimization Flags (Continued)

483.xalancbmk: 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/Intel-ic14.0-official-linux64-revC.html
http://www.spec.org/cpu2006/flags/PlatformHitachi-V1.2.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.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 Dec 16 13:09:33 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 16 December 2014.