## SPEC® CINT2006 Result

**Huawei**

**Huawei RH5885H V3 (Intel Xeon E7-8894 v4)**

SPECint® _rate2006 = Not Run

**SPECint_rate_base2006 = 3800**

<table>
<thead>
<tr>
<th>CPU2006 license:</th>
<th>3175</th>
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<tbody>
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<td>Test sponsor:</td>
<td>Huawei</td>
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<td>Tested by:</td>
<td>Huawei</td>
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<td>Test date:</td>
<td>Jan-2017</td>
</tr>
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<td>Hardware Availability:</td>
<td>Feb-2017</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Dec-2015</td>
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</tbody>
</table>

### Hardware

- **CPU Name:** Intel Xeon E7-8894 v4
- **CPU Characteristics:** Intel Turbo Boost Technology up to 3.40 GHz
- **CPU MHz:** 2400
- **FPU:** Integrated
- **CPU(s) enabled:** 96 cores, 4 chips, 24 cores/chip, 2 threads/core
- **CPU(s) orderable:** 2,4 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:** 60 MB I+D on chip per chip
- **Other Cache:** None
- **Memory:** 512 GB (32 x 16 GB 2Rx8 PC4-2400T-R, running at 1600 MHz)
- **Disk Subsystem:** 2 x 600 GB SAS, 10K RPM
- **Other Hardware:** None

### Software

- **Operating System:** SUSE Linux Enterprise Server 12 (x86_64) SP1
- **Kernel:** 3.12.49-11-default
- **Compiler:** C/C++: Version 16.0.0.101 of Intel C++ Studio XE for Linux
- **Auto Parallel:** No
- **File System:** xfs
- **System State:** Run level 5 (multi-user)
- **Base Pointers:** 32-bit
- **Peak Pointers:** 32/64-bit
- **Other Software:** Microquill SmartHeap V10.2

---

*Huawei RH5885H V3 (Intel Xeon E7-8894 v4)*

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SPECint_rate_base2006 = 3800
**SPEC CINT2006 Result**

**Huawei**

Huawei RH5885H V3 (Intel Xeon E7-8894 v4)

**SPECint_rate2006 = Not Run**

**SPECint_rate_base2006 = 3800**

**CPU2006 license:** 3175

**Test sponsor:** Huawei

**Tested by:** Huawei

**Test date:** Jan-2017

**Hardware Availability:** Feb-2017

**Software Availability:** Dec-2015

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**Results Table**

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</table>

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"

Turbo mode set with:

```
cpupower -c all frequency-set -g performance
```

**Platform Notes**

BIOS configuration:
Set Power Efficiency Mode to Performance
Set Lock_step to disabled
Baseboard Management Controller used to adjust the fan speed to 100%
Set C-State to C0/C1
Sysinfo program /home/spec/config/sysinfo.rev6914

`$Rev: 6914 $ $Date:: 2014-06-25 $` e3fbb8667b5a285932ceab81e28219e1
running on RH5885Hv3 Mon Jan 23 20:30:31 2017

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 E7-8894 v4 @ 2.40GHz
```

Continued on next page
Huawei RH5885H V3 (Intel Xeon E7-8894 v4)

Huawei

Huawei RH5885H V3 (Intel Xeon E7-8894 v4)

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CPU2006 license: 3175
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Platform Notes (Continued)

4 "physical id"s (chips)
192 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The
following excerpts from /proc/cpuinfo might not be reliable. Use with
cautions.)
cpu cores : 24
siblings : 48
physical 0: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26
27 28 29
physical 1: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26
27 28 29
physical 2: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26
27 28 29
physical 3: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26
27 28 29
cache size : 30720 KB

From /proc/meminfo
MemTotal: 529086232 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 12 SP1

From /etc/*release* /etc/*version*
SuSE-release:
SUSE Linux Enterprise Server 12 (x86_64)
VERSION = 12
PATCHLEVEL = 1
# This file is deprecated and will be removed in a future service pack or
# release.
# Please check /etc/os-release for details about this release.
os-release:
NAME="SLES"
VERSION="12-SP1"
VERSION_ID="12.1"
PRETTY_NAME="SUSE Linux Enterprise Server 12 SP1"
ID="sles"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:12:sp1"

uname -a:
(8d714a0) x86_64 x86_64 x86_64 GNU/Linux

run-level 5 Jan 23 18:02

SPEC is set to: /home/spec
filesystem type size used avail use% mounted on
dev/sda1 xfs 750G 32G 719G 5% /home
Additional information from dmidecode:
Continued on next page
SPEC CINT2006 Result

Huawei
Huawei RH5885H V3 (Intel Xeon E7-8894 v4)

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</tbody>
</table>

**Platform Notes (Continued)**

Warning: Use caution when you interpret this section. The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the "DMTF SMBIOS" standard.

BIOS American Megatrends Inc. BLISY102 11/07/2016
Memory:
64x NO DIMM NO DIMM
32x Samsung M393A2K43BB1-CRC 16 GB 2 rank 2400 MHz, configured at 1600 MHz

(End of data from sysinfo program)

**General Notes**

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

Binaries compiled on a system with 1x Intel Core i5-4670K CPU + 32GB memory using RedHat EL 7.1
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/trans transparent_hugepage enabled
Filesystem page cache cleared with:
echo 1> /proc/sys/vm/drop_caches
runc spec command invoked through numactl i.e.:
umactl --interleave=all runspec <etc>

**Base Compiler Invocation**

C benchmarks:
icc -m32 -L/opt/intel/compilers_and_libraries_2016/linux/compiler/lib/ia32_lin

C++ benchmarks:
icpc -m32 -L/opt/intel/compilers_and_libraries_2016/linux/compiler/lib/ia32_lin

**Base Portability Flags**

400.perlbench: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX_IA32
401.bzip2: -D_FILE_OFFSET_BITS=64
403.gcc: -D_FILE_OFFSET_BITS=64
429.mcf: -D_FILE_OFFSET_BITS=64
445.gobmk: -D_FILE_OFFSET_BITS=64
456.hmmer: -D_FILE_OFFSET_BITS=64
458.sjeng: -D_FILE_OFFSET_BITS=64
462.libquantum: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX
464.h264ref: -D_FILE_OFFSET_BITS=64

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Huawei
Huawei RH5885H V3 (Intel Xeon E7-8894 v4)

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### Base Portability Flags (Continued)

```bash
471.omnetpp: -D_FILE_OFFSET_BITS=64
473.astar: -D_FILE_OFFSET_BITS=64
483.xalancbmk: -D_FILE_OFFSET_BITS=64 -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
```

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


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


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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 Feb 7 17:00:44 2017 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 7 February 2017.