## SPEC® CINT2006 Result

### Huawei

**Huawei RH2285H v2 (Intel Xeon E5-2420 v2)**

<table>
<thead>
<tr>
<th>SPECint Rate2006</th>
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**CPU2006 license:** 3175  
**Test date:** Aug-2014  
**Hardware Availability:** Mar-2014  
**Test sponsor:** Huawei  
**Software Availability:** Nov-2013  
**Tested by:** Huawei

<table>
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<tr>
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### Hardware

- **CPU Name:** Intel Xeon E5-2420 v2  
- **CPU Characteristics:** Intel Turbo Boost Technology up to 2.70 GHz  
- **CPU MHZ:** 2200  
- **FPU:** Integrated  
- **CPU(s) enabled:** 12 cores, 2 chips, 6 cores/chip, 2 threads/core  
- **CPU(s) orderable:** 1,2 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:** 15 MB I+D on chip per chip  
- **Other Cache:** None  
- **Memory:** 48 GB (6 x 8 GB 2Rx4 PC3-12800R-11, ECC)  
- **Disk Subsystem:** 1 x 600 GB SAS, 10000 RPM  
- **Other Hardware:** None

### Software

- **Operating System:** Red Hat Enterprise Linux Server release 6.5 (Santiago)  
- **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
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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

Sysinfo program /spec14/config/sysinfo.rev6818
$Rev: 6818 $ $Date:: 2012-07-17 #$ e86d102572650a6e4d596a3cee98f191

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 E5-2420 v2 @ 2.20GHz
  2 "physical id"s (chips)
  24 "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 : 6
siblings : 12

Continued on next page
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**Platform Notes (Continued)**

- physical 0: cores 0 1 2 3 4 5
- physical 1: cores 0 1 2 3 4 5
- cache size: 15360 KB

From /proc/meminfo
- MemTotal: 49369748 kB
- HugePages_Total: 0
- Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
- Red Hat Enterprise Linux Server release 6.5 (Santiago)

From /etc/*release* /etc/*version*
- redhat-release: Red Hat Enterprise Linux Server release 6.5 (Santiago)
- system-release: Red Hat Enterprise Linux Server release 6.5 (Santiago)

uname -a:
- Linux localhost.localdomain 2.6.32-431.el6.x86_64 #1 SMP Sun Nov 10 22:19:54 EST 2013 x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Aug 6 16:52

SPEC is set to: /spec14
- Filesystem Type Size Used Avail Use% Mounted on
  - /dev/sda2 ext4 540G 25G 489G 5% /

Additional information from dmidecode:
- BIOS Insyde Corp. RMIBV626 05/04/2014
- Memory:
  - 6x Micron 36JSF1G72PZ-1G6K1 8 GB 1600 MHz 2 rank
  - 6x NO DIMM NO DIMM

(End of data from sysinfo program)

**General Notes**

Environment variables set by runspec before the start of the run:
- LD_LIBRARY_PATH = "/spec14/libs/32:/spec14/libs/64:/spec14/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
Filesystem page cache cleared with:
- echo 1 > /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
- numactl --interleave=all runspec <etc>
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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
-W1,-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
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml
http://www.spec.org/cpu2006/flags/Huawei-Platform-Settings-V1.0-IVB-RevG.xml
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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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