Dell Inc.

PowerEdge R920 (Intel Xeon E7-4809 v2, 1.90 GHz)

SPECint\_rate2006 = NC
SPECint\_rate\_base2006 = NC

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Jan-2014
Hardware Availability: Mar-2014
Software Availability: Oct-2013

SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Dell or Intel.
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Results Table

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</tbody>
</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.
SPEC CINT2006 Result

Dell Inc.

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Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

Platform Notes

BIOS settings:
Virtualization Technology disabled
Execute Disable disabled
System Profile set to Custom
Memory Patrol Scrub set to disabled
Sysinfo program
/root/Desktop/Performance/ic14.0_Oct17_2013/config/sysinfo.rev6818
$Rev: 6818 $ $Date:: 2012-07-17 #$ e86d102572650a6e4d596a3cee98f191
running on slesperf2 Thu Jan 16 20:59:57 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 E7-4809 v2 @ 1.90GHz
4 "physical ids (chips)
148 "Processors"
core siblings, Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.
cores : 6
siblings : 12
physical 0: cores 0 1 2 3 4 5
physical 1: cores 0 1 2 3 4 5
physical 2: cores 0 1 2 3 4 5
physical 3: cores 0 1 2 3 4 5
cache size : 12288 KB

From /proc/meminfo
MemTotal: 1058789108 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

Non-Compliant
SPEC CINT2006 Result

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Platform Notes (Continued)

/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 11 (x86_64)

From /etc/*release* /etc/*version*
SuSE-release:
SUSE Linux Enterprise Server 11 (SLES 11)
VERSION = 11
PATCHLEVEL = 3

uname -a:
Linux slesperf2 3.0.76-0.11-default #1 SMP Fri Jun 14 08:21:43 UTC 2013 (ccab990) x86_64 x86_64 x86_64 GNU/Linux

run-level 5 Jan 15 19:03 last=S

SPEC is set to: /root/Desktop/Performance/ic14.0_Oct17_2013

Filesystem Type Size Used Avail Use% Mounted on
/dev/sda2 ext2 365G 190G 174G 53% /

Additional information from dmidecode:
BIOS Dell Inc. 1.0.12/16/2013
Memory:
11x 00CE01B300CE M393B2G70BH0-YK0 16 GB 1333 MHz
6x 00CE00B300CE M393B2G70CB0-CMA 16 GB 1333 MHz
11x 00CE04B300CE M393B2G70BH0-YK0 16 GB 1333 MHz
6x 00CE04B300CE M393B2G70CB0-YK0 16 GB 1333 MHz

(End of data from sysinfo program)

Regarding the sysinfo display about the memory installed, although the information is accurate, two different types of DIMMs were used in the configuration and it may not be easy to immediately tell the difference. The following has been provided to help make the situation more clear.

DIMMs with "M393B2G70BH0-YK0" in the name are 16 GB PC3L-12800R-11 DIMMs
DIMMs with "M393B2G70CB0-CMA" in the name are 16 GB PC3-14900R-13 DIMMs

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**General Notes**

Environment variables set by runspec before the start of the run:


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/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>

**Base Compiler Invocation**

C benchmarks:
icc -m32
C++ benchmarks:
lcpc -m32

**Base Portability Flags**

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32
492.mcf: -DSPEC\_CPU\_LINUX
983.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
-Wl,-z,muldefs -L/sh -lsmartheap
SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Dell or Intel.
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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

http://www.spec.org/cpu2006/flags/Dell-Platform-Settings-V1.2-revC.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/Dell-Platform-Settings-V1.2-revC.xml

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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.
Originally published on 11 March 2014.