



SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint®_rate2006 = Not Run

ProLiant DL380 Gen9
(2.30 GHz, Intel Xeon E5-2650 v3)

SPECint_rate_base2006 = 826

CPU2006 license: 3

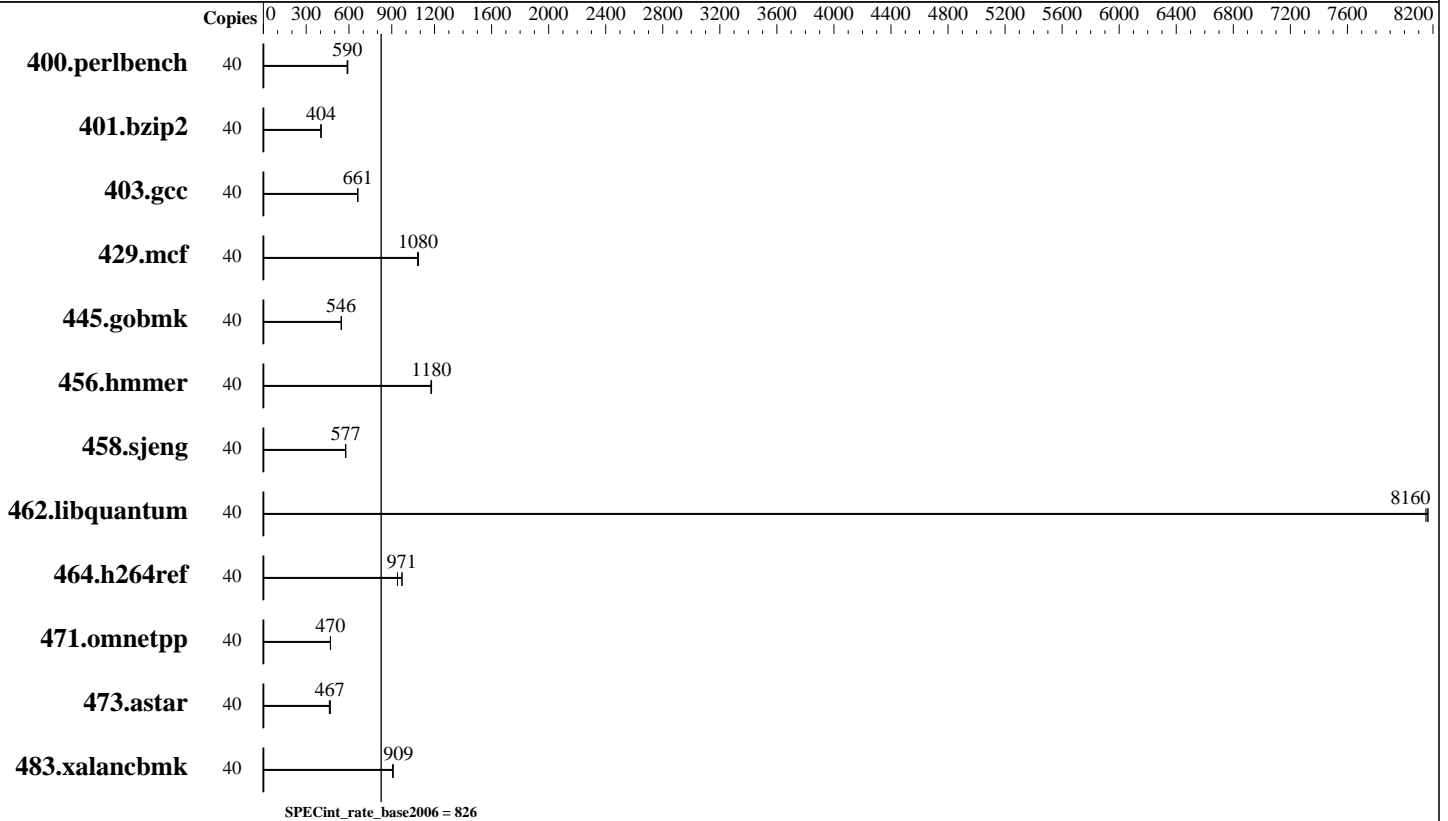
Test date: Apr-2015

Test sponsor: Hewlett-Packard Company

Hardware Availability: Aug-2014

Tested by: Hewlett-Packard Company

Software Availability: Jan-2015



Hardware

CPU Name: Intel Xeon E5-2650 v3
 CPU Characteristics: Intel Turbo Boost Technology up to 3.00 GHz
 CPU MHz: 2300
 FPU: Integrated
 CPU(s) enabled: 20 cores, 2 chips, 10 cores/chip, 2 threads/core
 CPU(s) orderable: 1,2 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: 25 MB I+D on chip per chip
 Other Cache: None
 Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2133P-R)
 Disk Subsystem: 1 x 300 GB 15 K SAS, RAID 0
 Other Hardware: None

Software

Operating System: SUSE Linux Enterprise Server 12 (x86_64)
 Kernel 3.12.28-4-default
 Compiler: C/C++: Version 15.0.0.090 of Intel C++ Studio XE for Linux
 Auto Parallel: No
 File System: xfs
 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 2006-2015 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = Not Run

ProLiant DL380 Gen9
(2.30 GHz, Intel Xeon E5-2650 v3)

SPECint_rate_base2006 = 826

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2015
Hardware Availability: Aug-2014
Software Availability: Jan-2015

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	40	661	592	662	590	666	587							
401.bzip2	40	954	405	955	404	956	404							
403.gcc	40	486	662	487	661	487	661							
429.mcf	40	336	1090	337	1080	336	1080							
445.gobmk	40	767	547	768	546	768	546							
456.hammer	40	318	1170	317	1180	317	1180							
458.sjeng	40	840	576	839	577	839	577							
462.libquantum	40	102	8150	101	8170	102	8160							
464.h264ref	40	910	973	912	971	942	940							
471.omnetpp	40	532	470	531	471	531	470							
473.astar	40	602	467	607	462	599	469							
483.xalancbmk	40	304	907	304	909	304	909							

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"
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>

Platform Notes

BIOS Configuration:
HP Power Profile set to Custom
HP Power Regulator to HP Static High Performance Mode
Minimum Processor Idle Power Core State set to C6 State
Minimum Processor Idle Power Package State set to No Package State
Collaborative Power Control set to Disabled
QPI Snoop Configuration set to Early Snoop
Thermal Configuration set to Maximum Cooling
Processor Power and Utilization Monitoring set to Disabled
Memory Refresh Rate set to 1x Refresh
Memory Patrol Scrubbing set to Disabled

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = Not Run

ProLiant DL380 Gen9
(2.30 GHz, Intel Xeon E5-2650 v3)

SPECint_rate_base2006 = 826

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2015
Hardware Availability: Aug-2014
Software Availability: Jan-2015

Platform Notes (Continued)

```
Sysinfo program /spec/cpu/config/sysinfo.rev6914
$Rev: 6914 $ $Date:: 2014-06-25 #$ e3fbb8667b5a285932ceab81e28219e1
running on pl190 Wed Apr 1 20:35:39 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
model name : Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz
 2 "physical id"s (chips)
 40 "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 : 5
  siblings  : 10
  physical 0: cores 0 1 2 3 4 8 9 10 11 12
  physical 1: cores 0 1 2 3 4 8 9 10 11 12
cache size : 12800 KB
```

```
From /proc/meminfo
MemTotal:      264552660 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
From /etc/*release* /etc/*version*
SuSE-release:
SUSE Linux Enterprise Server 12 (x86_64)
VERSION = 12
PATCHLEVEL = 0
# 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"
VERSION_ID="12"
PRETTY_NAME="SUSE Linux Enterprise Server 12"
ID="sles"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:12"
```

```
uname -a:
Linux pl190 3.12.28-4-default #1 SMP Thu Sep 25 17:02:34 UTC 2014 (9879bd4)
x86_64 x86_64 x86_64 GNU/Linux
```

run-level 3 Mar 30 08:09

```
SPEC is set to: /spec/cpu
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/mapper/vg_spec-lv_spec xfs   280G  37G  243G  14% /spec
Continued on next page
```



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = Not Run

ProLiant DL380 Gen9
(2.30 GHz, Intel Xeon E5-2650 v3)

SPECint_rate_base2006 = 826

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2015
Hardware Availability: Aug-2014
Software Availability: Jan-2015

Platform Notes (Continued)

Additional information from dmidecode:

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 HP P89 08/26/2014
Memory:
16x HP 752369-081 16 GB 2 rank 2133 MHz
8x UNKNOWN NOT AVAILABLE

(End of data from sysinfo program)

Regarding the sysinfo display about the memory installed, the correct amount of memory is 256 GB and the dmidecode description should have one line reading as:
16x HP 752369-081 16 GB 2 rank 2133 MHz

General Notes

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

Binaries compiled on a system with 1x Core i5-4670K CPU + 16GB memory using RedHat EL 7.0

Base Compiler Invocation

C benchmarks:
icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

C++ benchmarks:
icpc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = Not Run

ProLiant DL380 Gen9
(2.30 GHz, Intel Xeon E5-2650 v3)

SPECint_rate_base2006 = 826

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2015
Hardware Availability: Aug-2014
Software Availability: Jan-2015

Base Optimization Flags (Continued)

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -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

<http://www.spec.org/cpu2006/flags/Intel-ic15.0-official-linux64.html>
<http://www.spec.org/cpu2006/flags/HP-Platform-Flags-Intel-V1.2-HSW-revE.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic15.0-official-linux64.xml>
<http://www.spec.org/cpu2006/flags/HP-Platform-Flags-Intel-V1.2-HSW-revE.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 Apr 21 18:22:35 2015 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 21 April 2015.