



SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint®2006 = 58.2

SPECint_base2006 = 56.4

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Feb-2015

Hardware Availability: Sep-2014

Software Availability: Jul-2014



Hardware

CPU Name: Intel Xeon E5-2623 v3
CPU Characteristics: Intel Turbo Boost Technology up to 3.50 GHz
CPU MHz: 3000
FPU: Integrated
CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
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: 10 MB I+D on chip per chip
Other Cache: None
Memory: 256 GB (16 x 16 GB 2Rx4 PC4-1866P-R)
Disk Subsystem: 1 x 300GB SAS, 15K RPM
Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 7.0 (Maipo)
 3.10.0-123.el7.x86_64
Compiler: C/C++: Version 15.0.0.090 of Intel C++ Studio XE for Linux
Auto Parallel: Yes
File System: xfs
System State: Run level 3 (multi user)
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V10.0



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint2006 = **58.2**

SPECint_base2006 = **56.4**

CPU2006 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems

Test date: Feb-2015
Hardware Availability: Sep-2014
Software Availability: Jul-2014

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	243	40.3	244	40.1	244	40.1	210	46.5	210	46.5	210	46.5
401.bzip2	382	25.3	381	25.3	380	25.4	378	25.5	379	25.5	378	25.5
403.gcc	250	32.3	251	32.1	250	32.3	245	32.9	246	32.7	246	32.8
429.mcf	145	63.1	146	62.5	145	63.0	146	62.3	144	63.2	147	62.2
445.gobmk	367	28.6	367	28.6	368	28.5	366	28.6	366	28.6	366	28.6
456.hammer	134	69.4	135	69.2	134	69.4	140	66.8	140	66.7	139	66.9
458.sjeng	360	33.6	360	33.6	360	33.6	359	33.7	359	33.7	360	33.6
462.libquantum	6.03	3430	6.03	3430	6.19	3350	6.03	3430	6.03	3430	6.19	3350
464.h264ref	411	53.8	409	54.1	410	54.0	411	53.8	409	54.1	410	54.0
471.omnetpp	303	20.6	304	20.5	303	20.6	244	25.6	241	25.9	243	25.7
473.astar	219	32.0	219	32.0	222	31.6	221	31.8	221	31.8	220	32.0
483.xalancbmk	113	61.2	113	60.8	113	60.9	108	63.9	108	63.8	107	64.5

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

Submit Notes

The config file option 'submit' was used.

Operating System Notes

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

Platform Notes

```

CPU performance set to Enterprise
Power Technology set to Performance
Energy Performance BIAS setting set to Performance
Memory RAS configuration set to Maximum Performance
Intel Hyper-Threading Technology option set to Disabled
QPI Snoop Mode set to Early Snoop
Sysinfo program /opt/cpu2006-1.2/config/sysinfo.rev6914
$Rev: 6914 $ $Date:: 2014-06-25 #$ e3fbb8667b5a285932ceab81e28219e1
running on localhost.localdomain Thu Feb 26 12:20:27 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 E5-2623 v3 @ 3.00GHz
2 "physical id"s (chips)
8 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The

```

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint2006 = 58.2

SPECint_base2006 = 56.4

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Feb-2015

Hardware Availability: Sep-2014

Software Availability: Jul-2014

Platform Notes (Continued)

following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)

```
cpu cores : 4
siblings  : 4
physical 0: cores 0 1 2 3
physical 1: cores 0 1 2 3
cache size : 10240 KB
```

From /proc/meminfo

```
MemTotal:      263708620 kB
HugePages_Total:    0
Hugepagesize:    2048 kB
```

From /etc/*release* /etc/*version*

```
os-release:
NAME="Red Hat Enterprise Linux Server"
VERSION="7.0 (Maipo)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="7.0"
PRETTY_NAME="Red Hat Enterprise Linux Server 7.0 (Maipo)"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:redhat:enterprise_linux:7.0:GA:server"
redhat-release: Red Hat Enterprise Linux Server release 7.0 (Maipo)
system-release: Red Hat Enterprise Linux Server release 7.0 (Maipo)
system-release-cpe: cpe:/o:redhat:enterprise_linux:7.0:ga:server
```

uname -a:

```
Linux localhost.localdomain 3.10.0-123.el7.x86_64 #1 SMP Mon May 5 11:16:57
EDT 2014 x86_64 x86_64 x86_64 GNU/Linux
```

run-level 3 Feb 26 12:11

SPEC is set to: /opt/cpu2006-1.2

```
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/sda2        xfs   196G  13G  183G   7% /
```

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 Cisco Systems, Inc. B200M4.2.2.3d.0.111420141438 11/14/2014

Memory:

```
16x 0xCE00 M393A2G40DB0-CPB 16 GB 2 rank 2133 MHz, configured at 1866 MHz
8x NO DIMM NO DIMM
```

(End of data from sysinfo program)



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint2006 = 58.2

SPECint_base2006 = 56.4

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Feb-2015

Hardware Availability: Sep-2014

Software Availability: Jul-2014

General Notes

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

KMP_AFFINITY = "granularity=fine,compact,1,0"

LD_LIBRARY_PATH = "/opt/cpu2006-1.2/libs/32:/opt/cpu2006-1.2/libs/64:/opt/cpu2006-1.2/sh"

OMP_NUM_THREADS = "8"

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

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 -m64

C++ benchmarks:

icpc -m64

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64

401.bzip2: -DSPEC_CPU_LP64

403.gcc: -DSPEC_CPU_LP64

429.mcf: -DSPEC_CPU_LP64

445.gobmk: -DSPEC_CPU_LP64

456.hmmer: -DSPEC_CPU_LP64

458.sjeng: -DSPEC_CPU_LP64

462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

464.h264ref: -DSPEC_CPU_LP64

471.omnetpp: -DSPEC_CPU_LP64

473.astar: -DSPEC_CPU_LP64

483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:

-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32

C++ benchmarks:

-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -auto-p32

-Wl,-z,muldefs -L/sh -lsmartheap64



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint2006 = 58.2

SPECint_base2006 = 56.4

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Feb-2015

Hardware Availability: Sep-2014

Software Availability: Jul-2014

Base Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m64

400.perlbench: icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

445.gobmk: icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

C++ benchmarks (except as noted below):

icpc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

473.astar: icpc -m64

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32

401.bzip2: -DSPEC_CPU_LP64

403.gcc: -DSPEC_CPU_LP64

429.mcf: -DSPEC_CPU_LP64

456.hmmer: -DSPEC_CPU_LP64

458.sjeng: -DSPEC_CPU_LP64

462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

464.h264ref: -DSPEC_CPU_LP64

473.astar: -DSPEC_CPU_LP64

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)

-opt-prefetch -ansi-alias

401.bzip2: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)

-O3(pass 2) -no-prec-div -prof-use(pass 2) -auto-ilp32

-opt-prefetch -ansi-alias

Continued on next page

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org/



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint2006 = 58.2

SPECint_base2006 = 56.4

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Feb-2015

Hardware Availability: Sep-2014

Software Availability: Jul-2014

Peak Optimization Flags (Continued)

403.gcc: -xCORE-AVX2 -ipo -O3 -no-prec-div -inline-calloc
-opt-malloc-options=3 -auto-ilp32

429.mcf: -xCORE-AVX2 -ipo -O3 -no-prec-div -parallel
-opt-prefetch -auto-p32

445.gobmk: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias

456.hmmr: -xCORE-AVX2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32
-ansi-alias

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

462.libquantum: basepeak = yes

464.h264ref: basepeak = yes

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)
-opt-ra-region-strategy=block -ansi-alias
-Wl,-z,muldefs -L/sh -lsmartheap

473.astar: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-auto-p32 -Wl,-z,muldefs -L/sh -lsmartheap64

483.xalancbmk: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-ansi-alias -Wl,-z,muldefs -L/sh -lsmartheap

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-ic15.0-official-linux64.html>

<http://www.spec.org/cpu2006/flags/Cisco-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-ic15.0-official-linux64.xml>

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



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2623 v3 @ 3.50GHz)

SPECint2006 = 58.2

SPECint_base2006 = 56.4

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Feb-2015

Hardware Availability: Sep-2014

Software Availability: Jul-2014

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 Mar 24 17:18:54 2015 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 24 March 2015.