



SPEC® CINT2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS C480 M5 (Intel Xeon Gold 6148 2.40GHz)

SPECint®2006 = **Not Run**

SPECint_base2006 = **76.8**

CPU2006 license: 9019

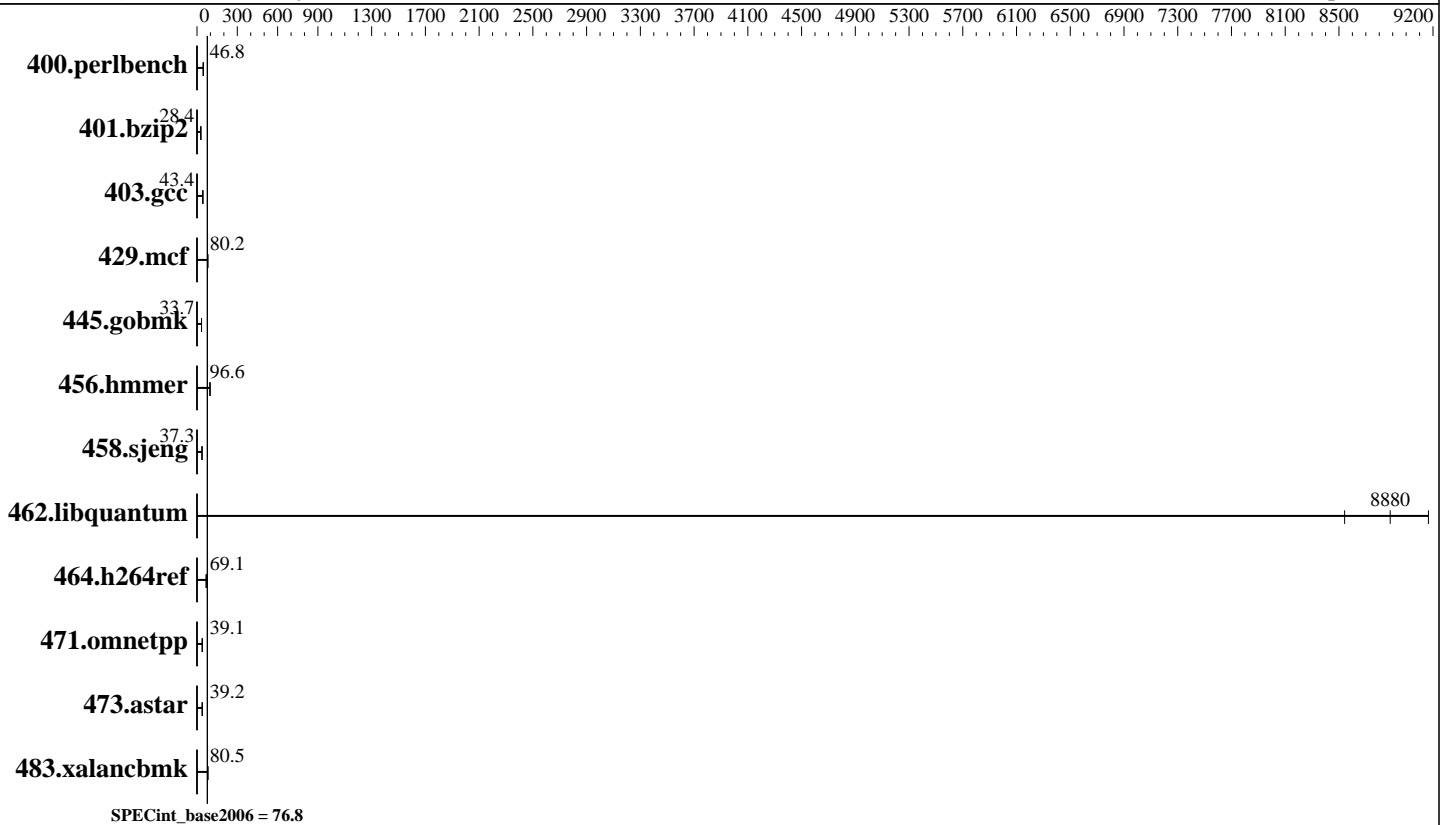
Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Aug-2017

Hardware Availability: Aug-2017

Software Availability: Apr-2017



Hardware

CPU Name: Intel Xeon Gold 6148
 CPU Characteristics: Intel Turbo Boost Technology up to 3.70 GHz
 CPU MHz: 2400
 FPU: Integrated
 CPU(s) enabled: 80 cores, 4 chips, 20 cores/chip
 CPU(s) orderable: 2,4 chips
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 1 MB I+D on chip per core
 L3 Cache: 27.5 MB I+D on chip per chip
 Other Cache: None
 Memory: 768 GB (48 x 16 GB 2Rx4 PC4-2666V-R)
 Disk Subsystem: 1 x 600 GB SAS HDD, 10K RPM
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 7.3 (Maipo)
 3.10.0-514.el7.x86_64
 Compiler: C/C++: Version 17.0.3.191 of Intel C/C++ Compiler 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 V10.2



SPEC CINT2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS C480 M5 (Intel Xeon Gold 6148 2.40GHz)

SPECint2006 = **Not Run**

SPECint_base2006 = **76.8**

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

Test date: Aug-2017
Hardware Availability: Aug-2017
Software Availability: Apr-2017

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	210	46.6	209	46.8	<u>209</u>	<u>46.8</u>						
401.bzip2	340	28.4	340	28.4	<u>340</u>	<u>28.4</u>						
403.gcc	185	43.5	186	43.3	<u>185</u>	<u>43.4</u>						
429.mcf	113	80.9	<u>114</u>	<u>80.2</u>	116	78.9						
445.gobmk	312	33.6	<u>311</u>	<u>33.7</u>	311	33.7						
456.hammer	96.6	96.6	<u>96.6</u>	<u>96.6</u>	96.3	96.9						
458.sjeng	326	37.2	<u>325</u>	<u>37.3</u>	325	37.3						
462.libquantum	<u>2.33</u>	<u>8880</u>	2.26	9170	2.43	8540						
464.h264ref	320	69.1	<u>320</u>	<u>69.1</u>	322	68.7						
471.omnetpp	<u>160</u>	<u>39.1</u>	161	38.9	156	40.0						
473.astar	180	39.0	179	39.2	<u>179</u>	<u>39.2</u>						
483.xalancbmk	85.8	80.4	85.4	80.8	<u>85.8</u>	<u>80.5</u>						

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

Operating System Notes

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

Platform Notes

BIOS Settings:

```

Intel HyperThreading Technology set to Disabled
CPU performance set to Enterprise
Power Performance Tuning set to OS
SNC set to Disabled
IMC Interleaving set to Auto
Patrol Scrub set to Disabled
Sysinfo program /home/cpu2006-1.2/config/sysinfo.rev6993
Revision 6993 of 2015-11-06 (b5e8d4b4eb51ed28d7f98696cbe290c1)
running on rhel73-spec Fri Aug 18 02:16:24 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) Gold 6148 CPU @ 2.40GHz
4 "physical id"s (chips)
80 "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 : 20

```

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS C480 M5 (Intel Xeon Gold 6148 2.40GHz)

SPECint2006 = **Not Run**

SPECint_base2006 = **76.8**

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

Test date: Aug-2017
Hardware Availability: Aug-2017
Software Availability: Apr-2017

Platform Notes (Continued)

```
siblings : 20
physical 0: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
physical 1: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
physical 2: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
physical 3: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
cache size : 28160 KB
```

```
From /proc/meminfo
MemTotal: 790981128 kB
HugePages_Total: 0
Hugepagesize: 2048 kB
```

```
From /etc/*release* /etc/*version*
os-release:
NAME="Red Hat Enterprise Linux Server"
VERSION="7.3 (Maipo)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="7.3"
PRETTY_NAME="Red Hat Enterprise Linux Server 7.3 (Maipo)"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:redhat:enterprise_linux:7.3:GA:server"
redhat-release: Red Hat Enterprise Linux Server release 7.3 (Maipo)
system-release: Red Hat Enterprise Linux Server release 7.3 (Maipo)
system-release-cpe: cpe:/o:redhat:enterprise_linux:7.3:ga:server
```

```
uname -a:
Linux rhel73-spec 3.10.0-514.el7.x86_64 #1 SMP Wed Oct 19 11:24:13 EDT 2016
x86_64 x86_64 x86_64 GNU/Linux
```

run-level 3 Aug 18 01:44

```
SPEC is set to: /home/cpu2006-1.2
Filesystem Type Size Used Avail Use% Mounted on
/dev/sdb5 xfs 503G 28G 476G 6% /home
```

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. C480M5.3.1.0.272.0613172154 06/13/2017 Cisco Systems, Inc. C480M5.3.1.0.272.0613172154 06/13/2017

Memory:
96x 0xCE00 M393A2G40EB2-CTD 16 GB 2 rank 2666 MHz

(End of data from sysinfo program)
The correct amount of Memory installed is 768 GB (48 x 16 GB)
and the dmidecode is reporting invalid number of DIMMs installed
Installed Memory:
48x 0xCE00 M393A2G40EB2-CTD 16 GB 2 rank 2666 MHz



SPEC CINT2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

Cisco Systems

SPECint2006 = Not Run

Cisco UCS C480 M5 (Intel Xeon Gold 6148
2.40GHz)

SPECint_base2006 = 76.8

CPU2006 license: 9019

Test date: Aug-2017

Test sponsor: Cisco Systems

Hardware Availability: Aug-2017

Tested by: Cisco Systems

Software Availability: Apr-2017

General Notes

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

KMP_AFFINITY = "granularity=fine,compact"

LD_LIBRARY_PATH = "/home/cpu2006-1.2/lib/ia32:/home/cpu2006-1.2/lib/intel64:/home/cpu2006-1.2/sh10.2"

OMP_NUM_THREADS = "80"

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM

memory using Redhat Enterprise Linux 7.2

Transparent Huge Pages enabled with:

echo always > /sys/kernel/mm/transparent_hugepage/enabled

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.hmmmer: -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 -qopt-prefetch

-auto-p32

C++ benchmarks:

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

-Wl,-z,muldefs -L/sh10.2 -lsmartheap64



SPEC CINT2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

Cisco Systems

Cisco UCS C480 M5 (Intel Xeon Gold 6148 2.40GHz)

SPECint2006 = **Not Run**

SPECint_base2006 = **76.8**

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Aug-2017

Hardware Availability: Aug-2017

Software Availability: Apr-2017

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-ic17.0-official-linux64-revF.html>

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

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

<http://www.spec.org/cpu2006/flags/Intel-ic17.0-official-linux64-revF.xml>

<http://www.spec.org/cpu2006/flags/Cisco-Platform-Settings-V1.2-revH.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 Wed Sep 6 11:46:27 2017 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 5 September 2017.