SPEC® CINT2006 Result
Copyright 2006-2017 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise
(Test Sponsor: HPE)

Synergy 480 Gen10
(2.60 GHz, Intel Xeon Gold 6142)

$SPECint®2006 =$ **Not Run**

$SPECint\_base2006 =$ **73.6**

CPU2006 license: 3	**Test date:** Nov-2017
Test sponsor: HPE	**Hardware Availability:** Oct-2017
Tested by: HPE	**Software Availability:** Apr-2017


```
400.perlbench    46.7
401.bzip2        28.3
403.gcc          34.2
429.mcf          76.8
445.gobmk        33.5
456.hmmer        96.9
458.sjeng        36.8
462.libquantum   7830
464.h264ref      69.8
471.omnetpp      35.3
473.astar        39.0
483.xalancbmk    80.2
```

SPECint_base2006 = 73.6

Hardware

CPU Name:	Intel Xeon Gold 6142
CPU Characteristics:	Intel Turbo Boost Technology up to 3.70 GHz
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	32 cores, 2 chips, 16 cores/chip
CPU(s) orderable:	1, 2 chip(s)
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	1 MB I+D on chip per core
L3 Cache:	22 MB I+D on chip per chip
Other Cache:	None
Memory:	384 GB (24 x 16 GB 2Rx8 PC4-2666V-R)
Disk Subsystem:	1 x 960 GB SATA SSD, RAID 0
Other Hardware:	None

Software

Operating System:	SUSE Linux Enterprise Server 12 (x86_64) SP2 Kernel 4.4.21-69-default
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:	Not Applicable
Other Software:	Microquill SmartHeap V10.2

SPEC CINT2006 Result
Copyright 2006-2017 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise
(Test Sponsor: HPE)

Synergy 480 Gen10
(2.60 GHz, Intel Xeon Gold 6142)

SPECint2006 =   Not Run
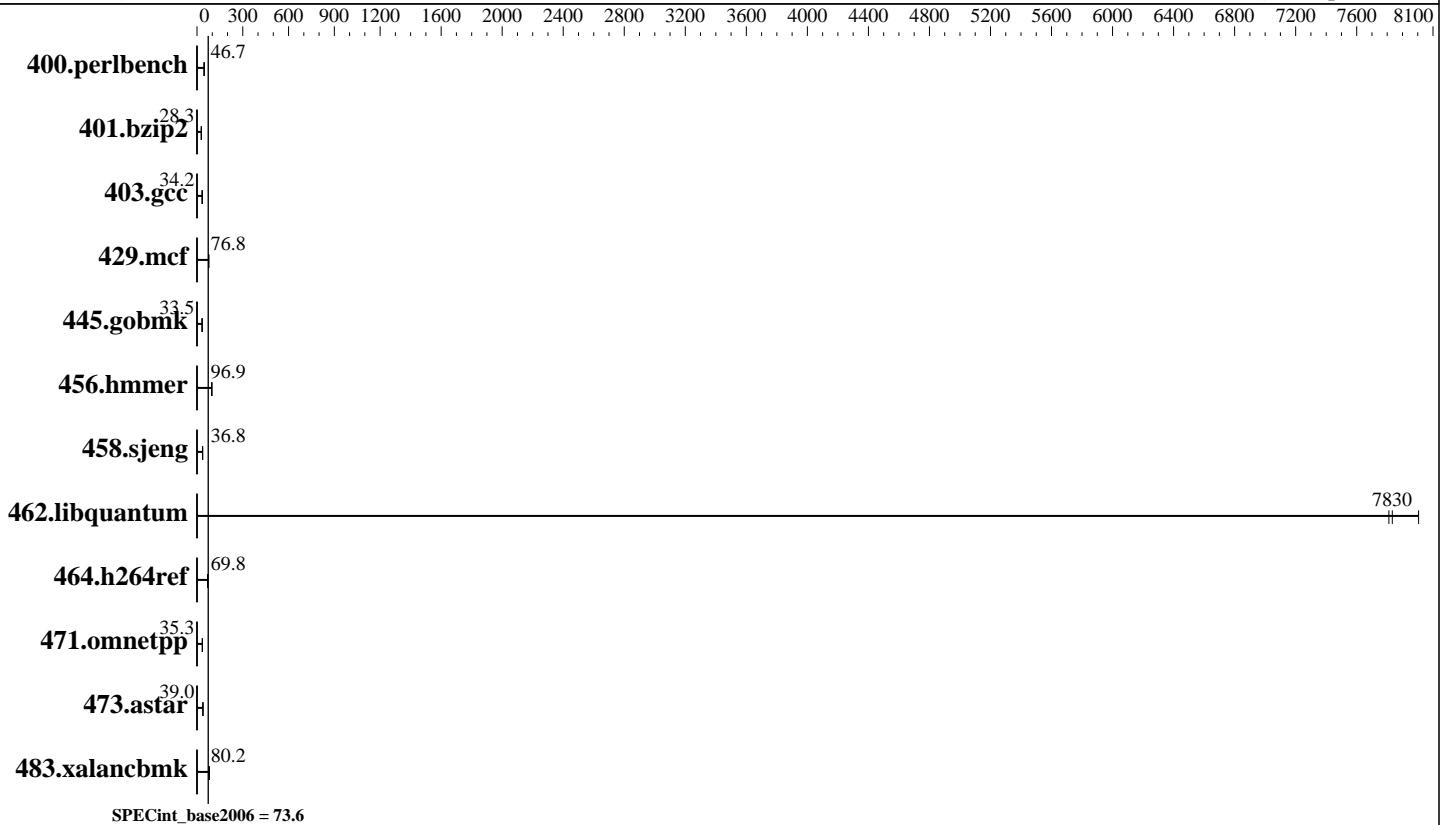
SPECint_base2006 =   73.6

CPU2006 license: 3
Test sponsor: HPE
Tested by: HPE

Test date: Nov-2017
Hardware Availability: Oct-2017
Software Availability: Apr-2017

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	**209**	**46.7**	209	46.8	209	46.7						
401.bzip2	**341**	**28.3**	341	28.3	340	28.4						
403.gcc	**236**	**34.2**	236	34.2	236	34.1						
429.mcf	**119**	**76.8**	118	77.6	120	75.8						
445.gobmk	313	33.5	313	33.6	**313**	**33.5**						
456.hmmer	95.7	97.5	**96.3**	**96.9**	96.5	96.7						
458.sjeng	**329**	**36.8**	329	36.8	329	36.8						
462.libquantum	2.65	7810	**2.65**	**7830**	2.59	8010						
464.h264ref	317	69.7	**317**	**69.8**	317	69.9						
471.omnetpp	176	35.4	180	34.7	**177**	**35.3**						
473.astar	**180**	**39.0**	180	39.0	180	38.9						
483.xalancbmk	87.1	79.2	85.1	81.1	**86.0**	**80.2**						

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"
Transparent Huge Pages enabled by default
Filesystem page cache cleared with:
shell invocation of 'sync; echo 3 > /proc/sys/vm/drop_caches' prior to run
IRQ balance service was stop using "service irqbalance stop"
Tuned-adm profile was set to Throughtput-Performance
```

Platform Notes

```
BIOS Configuration:
 Intel Hyperthreading set to Disabled
 Thermal Configuration set to Maximum Cooling
 LLC Prefetch set to Enabled
 LLC Dead Line Allocation set to Disabled
 Memory Patrol Scrubbing set to Disabled
 Workload Profile set to General Peak Frequency Compute
  Energy/Performance Bias set to Maximum Performance
 Workload Profile set to Custom
  NUMA Group Size Optimization set to Flat

 Sysinfo program /home/cpu2006/config/sysinfo.rev6993
 Revision 6993 of 2015-11-06 (b5e8d4b4eb51ed28d7f98696cbe290c1)
 running on linux-vjuj Mon Nov 13 10:11:09 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
```

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Synergy 480 Gen10
(2.60 GHz, Intel Xeon Gold 6142)

$SPECint2006 =$ Not Run

$SPECint\_base2006 =$ 73.6

CPU2006 license: 3		**Test date:**	Nov-2017
Test sponsor:	HPE	**Hardware Availability:**	Oct-2017
Tested by:	HPE	**Software Availability:**	Apr-2017

Platform Notes (Continued)

```
From /proc/cpuinfo
   model name : Intel(R) Xeon(R) Gold 6142 CPU @ 2.60GHz
      2 "physical id"s (chips)
      32 "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 : 16
      siblings  : 16
      physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
      physical 1: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
   cache size : 22528 KB

From /proc/meminfo
   MemTotal:       395929796 kB
   HugePages_Total:        0
   Hugepagesize:        2048 kB

/usr/bin/lsb_release -d
   SUSE Linux Enterprise Server 12 SP2

From /etc/*release* /etc/*version*
   SuSE-release:
      SUSE Linux Enterprise Server 12 (x86_64)
      VERSION = 12
      PATCHLEVEL = 2
      # 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-SP2"
      VERSION_ID="12.2"
      PRETTY_NAME="SUSE Linux Enterprise Server 12 SP2"
      ID="sles"
      ANSI_COLOR="0;32"
      CPE_NAME="cpe:/o:suse:sles:12:sp2"

uname -a:
   Linux linux-vjuj 4.4.21-69-default #1 SMP Tue Oct 25 10:58:20 UTC 2016
   (9464f67) x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Nov 13 10:10

SPEC is set to: /home/cpu2006
   Filesystem      Type  Size  Used Avail Use% Mounted on
   /dev/sda4       xfs   852G   84G  769G  10% /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
```

SPEC CINT2006 Result
Copyright 2006-2017 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Synergy 480 Gen10
(2.60 GHz, Intel Xeon Gold 6142)

SPECint2006 =   Not Run

SPECint_base2006 =   73.6

CPU2006 license: 3		**Test date:**	Nov-2017
Test sponsor: HPE		**Hardware Availability:**	Oct-2017
Tested by: HPE		**Software Availability:**	Apr-2017

Platform Notes (Continued)

```
   determined", but the intent may not be met, as there are frequent changes to
   hardware, firmware, and the "DMTF SMBIOS" standard.

    BIOS HPE I42 09/27/2017
    Memory:
     24x UNKNOWN NOT AVAILABLE 16 GB 2 rank 2666 MHz

  (End of data from sysinfo program)
```

General Notes

```
Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,compact"
LD_LIBRARY_PATH = "/home/cpu2006/lib/ia32:/home/cpu2006/lib/intel64:/home/cpu2006/sh10.2"
OMP_NUM_THREADS = "32"

 Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM
 memory using Redhat Enterprise Linux 7.2
```

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
```

SPEC CINT2006 Result
Copyright 2006-2017 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise
(Test Sponsor: HPE)

Synergy 480 Gen10
(2.60 GHz, Intel Xeon Gold 6142)

$SPECint2006 =$ **Not Run**

$SPECint\_base2006 =$ **73.6**

CPU2006 license: 3		**Test date:**	Nov-2017
Test sponsor: HPE		**Hardware Availability:**	Oct-2017
Tested by: HPE		**Software Availability:**	Apr-2017

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
```

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/HPE-Platform-Flags-Intel-V1.2-SKX-revF.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/HPE-Platform-Flags-Intel-V1.2-SKX-revF.xml

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 Nov 29 12:30:05 2017 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 29 November 2017.