### Hewlett Packard Enterprise

**Test Sponsor:** HPE  
**Synergy 480 Gen10**  
**(3.00 GHz, Intel Xeon Gold 6136)**

### SPECint®2006 = Not Run

**SPECint_base2006 = 74.7**

**CPU2006 license:** 3  
**Test sponsor:** HPE

**Test date:** Nov-2017  
**Hardware Availability:** Oct-2017

**Tested by:** HPE  
**Software Availability:** Apr-2017

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>468</td>
</tr>
<tr>
<td>401.bzip2</td>
<td>282</td>
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<tr>
<td>403.gcc</td>
<td>397</td>
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<tr>
<td>429.mcf</td>
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<td>445.gobmk</td>
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<tr>
<td>456.hmmer</td>
<td>976</td>
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<tr>
<td>458.sjeng</td>
<td>369</td>
</tr>
<tr>
<td>462.libquantum</td>
<td>715</td>
</tr>
<tr>
<td>464.h264ref</td>
<td>365</td>
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<tr>
<td>471.omnetpp</td>
<td>390</td>
</tr>
<tr>
<td>473.astar</td>
<td>807</td>
</tr>
</tbody>
</table>

**SPECint_base2006 = 74.7**

#### Hardware

- **CPU Name:** Intel Xeon Gold 6136  
- **CPU Characteristics:** Intel Turbo Boost Technology up to 3.70 GHz  
- **CPU MHz:** 3000  
- **FPU:** Integrated  
- **CPU(s) enabled:** 24 cores, 2 chips, 12 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:** 24.75 MB I+D on chip per core  
- **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

#### 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

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Results Table

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<tr>
<th>Benchmark</th>
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<td>80.7</td>
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</tr>
</tbody>
</table>

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 Throughput-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)
runtime on linux-vjuj Thu Nov 30 10:18:57 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

Continued on next page
### Platform Notes (Continued)

From `/proc/cpuinfo`:
- `model name : Intel(R) Xeon(R) Gold 6136 CPU @ 3.00GHz`
- `2 "physical id"s (chips)`
- `24 "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 : 12`
  - `siblings : 12`
  - `physical 0: cores 0 1 2 3 4 8 9 11 17 18 19 20`
  - `physical 1: cores 0 1 2 3 4 9 10 16 18 19 25 26`
- `cache size : 25344 KB`

From `/proc/meminfo`:
- `MemTotal: 395930340 kB`
- `HugePages_Total: 0`
- `Hugepagesize: 2048 kB`

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

From `/etc/*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:`
  (9464f67) x86_64 x86_64 x86_64 GNU/Linux`

run-level 3 Nov 30 10:16

SPEC is set to: `/home/cpu2006`

Filesystem    Type        Size  Used  Avail Use% Mounted on
/dev/sda4    xfs         852G  52G  800G   7%  /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 continuity.
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Platform Notes (Continued)

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 = "24"

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:
licpc -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
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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

Continued on next page
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Base Optimization Flags (Continued)

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -auto-p32
-stdc++ -z,uldefs -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-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/HPE-Platform-Flags-Intel-V1.2-SKX-revH.xml

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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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