



SPEC® CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

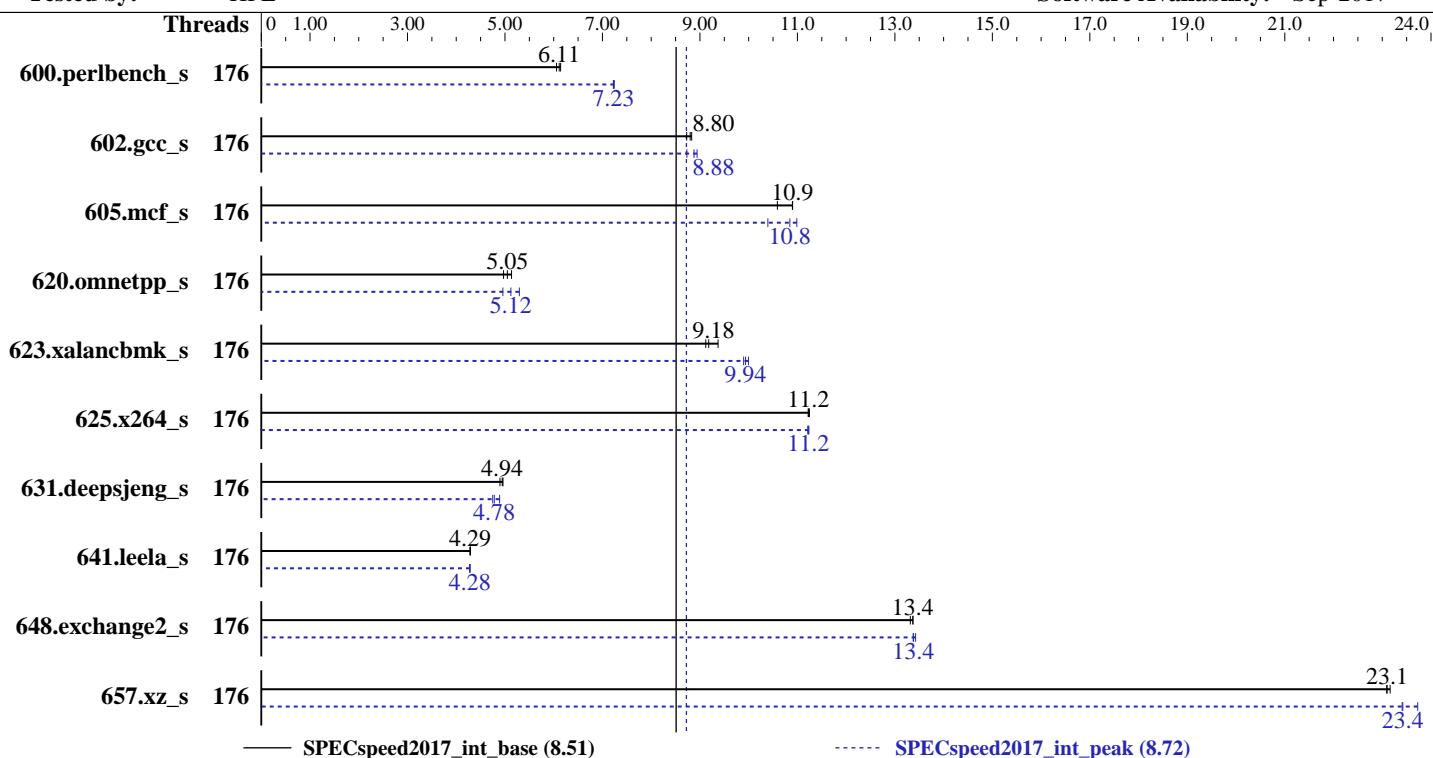
Test Date: Nov-2017

Test Sponsor: HPE

Hardware Availability: Oct-2017

Tested by: HPE

Software Availability: Sep-2017



— SPECspeed2017_int_base (8.51)

---- SPECspeed2017_int_peak (8.72)

Hardware

CPU Name: Intel Xeon Gold 6152
 Max MHz.: 3700
 Nominal: 2100
 Enabled: 88 cores, 4 chips, 2 threads/core
 Orderable: 1, 2, 4 chip(s)
 Cache L1: 32 KB I + 32 KB D on chip per core
 L2: 1 MB I+D on chip per core
 L3: 30.25 MB I+D on chip per chip
 Other: None
 Memory: 768 GB (48 x 16 GB 2Rx8 PC4-2666V-R)
 Storage: 2 x 480 GB SATA SSD, RAID 0
 Other: None

Software

OS: SUSE Linux Enterprise Server 12 (x86_64) SP2
 Kernel 4.4.21-69-default
 Compiler: C/C++: Version 18.0.0.128 of Intel C/C++ Compiler for Linux;
 Fortran: Version 18.0.0.128 of Intel Fortran Compiler for Linux
 Parallel: Yes
 Firmware: HPE BIOS Version U34 released Oct-2017 (tested with U34 9/29/2017)
 File System: xfs
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 32/64-bit
 Other: jemalloc: jemalloc memory allocator library V5.0.1;
 jemalloc: configured and built at default for 32bit (i686) and 64bit (x86_64) targets;
 jemalloc: built with the RedHat Enterprise 7.4, and the system compiler gcc 4.8.5;
 jemalloc: sources available via jemalloc.net



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Date: Nov-2017

Test Sponsor: HPE

Hardware Availability: Oct-2017

Tested by: HPE

Software Availability: Sep-2017

Results Table

Benchmark	Base								Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s	176	293	6.06	290	6.11	289	6.14	176	245	7.24	246	7.22	246	7.23		
602.gcc_s	176	451	8.83	456	8.73	452	8.80	176	449	8.88	445	8.94	456	8.73		
605.mcf_s	176	433	10.9	433	10.9	446	10.6	176	430	11.0	454	10.4	435	10.8		
620.omnetpp_s	176	318	5.13	328	4.97	323	5.05	176	329	4.96	308	5.29	318	5.12		
623.xalancbmk_s	176	155	9.12	154	9.18	151	9.37	176	143	9.90	143	9.94	142	10.0		
625.x264_s	176	157	11.2	157	11.2	157	11.2	176	157	11.2	157	11.2	157	11.2		
631.deepsjeng_s	176	290	4.94	289	4.96	293	4.90	176	293	4.89	302	4.75	300	4.78		
641.leela_s	176	398	4.29	398	4.29	398	4.28	176	398	4.28	399	4.28	399	4.28		
648.exchange2_s	176	220	13.4	221	13.3	220	13.4	176	219	13.4	220	13.4	220	13.4		
657.xz_s	176	267	23.2	268	23.1	268	23.1	176	261	23.7	264	23.4	264	23.4		
SPECspeed2017_int_base = 8.51																
SPECspeed2017_int_peak = 8.72																

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
irqbalance disabled with "systemctl stop irqbalance"
tuned profile set with "tuned-adm profile throughput-performance"
```

General Notes

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

KMP_AFFINITY = "granularity=fine,scatter"

LD_LIBRARY_PATH = "/home/cpu2017/lib/ia32:/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-32:/home/cpu2017/je5.0.1-64"
OMP_STACKSIZE = "192M"

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM
memory using Redhat Enterprise Linux 7.4

Platform Notes

BIOS Configuration:

Thermal Configuration set to Maximum Cooling

LLC Prefetch set to Enabled

LLC Dead Line Allocation set to Disabled

Stale A to S set to Enabled

Memory Patrol Scrubbing set to Disabled

Workload Profile set to General Peak Frequency Compute

Energy/Performance Bias set to Maximum Performance

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Date: Nov-2017

Test Sponsor: HPE

Hardware Availability: Oct-2017

Tested by: HPE

Software Availability: Sep-2017

Platform Notes (Continued)

Workload Profile set to Custom

NUMA Group Size Optimization set to Flat

Sysinfo program /home/cpu2017/bin/sysinfo

Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f

running on linux-e6az Wed Nov 22 13:19:30 2017

SUT (System Under Test) info as seen by some common utilities.

For more information on this section, see

<https://www.spec.org/cpu2017/Docs/config.html#sysinfo>

From /proc/cpuinfo

```
model name : Intel(R) Xeon(R) Gold 6152 CPU @ 2.10GHz
        4 "physical id"s (chips)
        176 "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 : 22
siblings : 44
physical 0: cores 0 1 2 3 8 9 10 11 12 16 17 18 19 20 21 24 25 26 27 28
physical 1: cores 0 1 2 3 8 9 10 11 12 16 17 18 19 20 21 24 25 26 27 28
physical 2: cores 0 1 2 3 8 9 10 11 12 16 17 18 19 20 21 24 25 26 27 28
physical 3: cores 0 1 2 3 8 9 10 11 12 16 17 18 19 20 21 24 25 26 27 28
```

From lscpu:

```
Architecture:           x86_64
CPU op-mode(s):        32-bit, 64-bit
Byte Order:             Little Endian
CPU(s):                176
On-line CPU(s) list:   0-175
Thread(s) per core:    2
Core(s) per socket:    22
Socket(s):              4
NUMA node(s):           8
Vendor ID:              GenuineIntel
CPU family:             6
Model:                 85
Model name:             Intel(R) Xeon(R) Gold 6152 CPU @ 2.10GHz
Stepping:               4
CPU MHz:                2095.082
BogoMIPS:               4190.16
Virtualization:         VT-x
L1d cache:              32K
L1i cache:              32K
L2 cache:                1024K
L3 cache:                30976K
NUMA node0 CPU(s):      0-10,88-98
NUMA node1 CPU(s):      11-21,99-109
```

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Date: Nov-2017

Test Sponsor: HPE

Hardware Availability: Oct-2017

Tested by: HPE

Software Availability: Sep-2017

Platform Notes (Continued)

NUMA node2 CPU(s): 22-32,110-120
NUMA node3 CPU(s): 33-43,121-131
NUMA node4 CPU(s): 44-54,132-142
NUMA node5 CPU(s): 55-65,143-153
NUMA node6 CPU(s): 66-76,154-164
NUMA node7 CPU(s): 77-87,165-175

Flags:
fpu vme de pse tsc msr pae mce cx8 apic sep mttr pge mca cmov
pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp
lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc
aperfmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg
fma cx16 xtpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes
xsave avx f16c rdrand lahf_lm abm 3dnowprefetch ida arat epb pln pts dtherm intel_pt
tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2
erms invpcid rtm cqm mpx avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd
avx512bw avx512vl xsaveopt xgetbv1 cqm_llc cqm_occup_llc

/proc/cpuinfo cache data
cache size : 30976 KB

From numactl --hardware WARNING: a numactl 'node' might or might not correspond to a physical chip.

available: 8 nodes (0-7)
node 0 cpus: 0 1 2 3 4 5 6 7 8 9 10 88 89 90 91 92 93 94 95 96 97 98
node 0 size: 96346 MB
node 0 free: 87343 MB
node 1 cpus: 11 12 13 14 15 16 17 18 19 20 21 99 100 101 102 103 104 105 106 107 108 109
node 1 size: 96764 MB
node 1 free: 90195 MB
node 2 cpus: 22 23 24 25 26 27 28 29 30 31 32 110 111 112 113 114 115 116 117 118 119 120
node 2 size: 96764 MB
node 2 free: 90409 MB
node 3 cpus: 33 34 35 36 37 38 39 40 41 42 43 121 122 123 124 125 126 127 128 129 130 131
node 3 size: 96764 MB
node 3 free: 90411 MB
node 4 cpus: 44 45 46 47 48 49 50 51 52 53 54 132 133 134 135 136 137 138 139 140 141 142
node 4 size: 96764 MB
node 4 free: 90371 MB
node 5 cpus: 55 56 57 58 59 60 61 62 63 64 65 143 144 145 146 147 148 149 150 151 152 153
node 5 size: 96764 MB
node 5 free: 90417 MB
node 6 cpus: 66 67 68 69 70 71 72 73 74 75 76 154 155 156 157 158 159 160 161 162 163 164

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Date: Nov-2017

Test Sponsor: HPE

Hardware Availability: Oct-2017

Tested by: HPE

Software Availability: Sep-2017

Platform Notes (Continued)

```
node 6 size: 96764 MB
node 6 free: 90419 MB
node 7 cpus: 77 78 79 80 81 82 83 84 85 86 87 165 166 167 168 169 170 171 172 173 174
175
node 7 size: 96763 MB
node 7 free: 90416 MB
node distances:
node   0   1   2   3   4   5   6   7
  0: 10 21 31 31 31 31 31 31
  1: 21 10 31 31 31 31 31 31
  2: 31 31 10 21 31 31 31 31
  3: 31 31 21 10 31 31 31 31
  4: 31 31 31 31 10 21 31 31
  5: 31 31 31 31 21 10 31 31
  6: 31 31 31 31 31 31 10 21
  7: 31 31 31 31 31 31 21 10

From /proc/meminfo
MemTotal:      792267868 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-e6az 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 21 14:49
```

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Nov-2017

Hardware Availability: Oct-2017

Software Availability: Sep-2017

Platform Notes (Continued)

SPEC is set to: /home/cpu2017

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda4	xfs	852G	71G	781G	9%	/home

Additional information from dmidecode follows. 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 HPE U34 09/29/2017

Memory:

48x UNKNOWN NOT AVAILABLE 16 GB 2 rank 2666

(End of data from sysinfo program)

Compiler Version Notes

=====

CC 600.perlbench_s(base) 602.gcc_s(base) 605.mcf_s(base) 625.x264_s(base,
peak) 657.xz_s(base)

=====

icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

=====

CC 600.perlbench_s(peak) 602.gcc_s(peak) 605.mcf_s(peak) 657.xz_s(peak)

=====

icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

=====

CXXC 620.omnetpp_s(base) 623.xalancbmk_s(base) 631.deepsjeng_s(base)
641.leela_s(base)

=====

icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

=====

CXXC 620.omnetpp_s(peak) 623.xalancbmk_s(peak) 631.deepsjeng_s(peak)
641.leela_s(peak)

=====

icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Nov-2017

Hardware Availability: Oct-2017

Software Availability: Sep-2017

Compiler Version Notes (Continued)

```
=====
```

```
FC 648.exchange2_s(base, peak)
```

```
=====
```

```
ifort (IFORT) 18.0.0 20170811
```

```
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
=====
```

Base Compiler Invocation

C benchmarks:

```
icc
```

C++ benchmarks:

```
icpc
```

Fortran benchmarks:

```
ifort
```

Base Portability Flags

```
600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64
```

```
602.gcc_s: -DSPEC_LP64
```

```
605.mcf_s: -DSPEC_LP64
```

```
620.omnetpp_s: -DSPEC_LP64
```

```
623.xalancbmk_s: -DSPEC_LP64 -DSPEC_LINUX
```

```
625.x264_s: -DSPEC_LP64
```

```
631.deepsjeng_s: -DSPEC_LP64
```

```
641.leela_s: -DSPEC_LP64
```

```
648.exchange2_s: -DSPEC_LP64
```

```
657.xz_s: -DSPEC_LP64
```

Base Optimization Flags

C benchmarks:

```
-Wl,-z,muldefs -xCORE-AVX2 -ipo -O3 -no-prec-div  
-qopt-mem-layout-trans=3 -qopenmp -DSPEC_OPENMP  
-L/usr/local/jet5.0.1-64/lib -ljemalloc
```

C++ benchmarks:

```
-Wl,-z,muldefs -xCORE-AVX2 -ipo -O3 -no-prec-div
```

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Nov-2017

Hardware Availability: Oct-2017

Software Availability: Sep-2017

Base Optimization Flags (Continued)

C++ benchmarks (continued):

-qopt-mem-layout-trans=3 -L/usr/local/je5.0.1-64/lib -ljemalloc

Fortran benchmarks:

-Wl,-z,muldefs -xCORE-AVX2 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte
-L/usr/local/je5.0.1-64/lib -ljemalloc

Base Other Flags

C benchmarks:

-m64 -std=c11

C++ benchmarks:

-m64

Fortran benchmarks:

-m64

Peak Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

ifort

Peak Portability Flags

600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xalancbmk_s: -D_FILE_OFFSET_BITS=64 -DSPEC_LINUX
625.x264_s: -DSPEC_LP64
631.deepsjeng_s: -DSPEC_LP64

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Nov-2017

Hardware Availability: Oct-2017

Software Availability: Sep-2017

Peak Portability Flags (Continued)

641.leela_s: -DSPEC_LP64
648.exchange2_s: -DSPEC_LP64
657.xz_s: -DSPEC_LP64

Peak Optimization Flags

C benchmarks:

600.perlbench_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2
-xCORE-AVX2 -qopt-mem-layout-trans=3 -ipo -O3
-no-prec-div -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP -fno-strict-overflow
-L/usr/local/je5.0.1-64/lib -ljemalloc

602.gcc_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2
-xCORE-AVX2 -qopt-mem-layout-trans=3 -ipo -O3
-no-prec-div -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP -L/usr/local/je5.0.1-64/lib -ljemalloc

605.mcf_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo
-xCORE-AVX2 -O3 -no-prec-div -qopt-mem-layout-trans=3
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-L/usr/local/je5.0.1-64/lib -ljemalloc

625.x264_s: -Wl,-z,muldefs -xCORE-AVX2 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=3 -qopenmp -DSPEC_OPENMP
-L/usr/local/je5.0.1-64/lib -ljemalloc

657.xz_s: Same as 602.gcc_s

C++ benchmarks:

620.omnetpp_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo
-xCORE-AVX2 -O3 -no-prec-div -qopt-mem-layout-trans=3
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-L/usr/local/je5.0.1-64/lib -ljemalloc

623.xalancbmk_s: -L/opt/intel/compilers_and_libraries_2018/linux/lib/ia32
-Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo
-xCORE-AVX2 -O3 -no-prec-div -qopt-mem-layout-trans=3
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-L/usr/local/je5.0.1-32/lib -ljemalloc

(Continued on next page)



SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL560 Gen10

(2.10 GHz, Intel Xeon Gold 6152)

SPECspeed2017_int_base = 8.51

SPECspeed2017_int_peak = 8.72

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Nov-2017

Hardware Availability: Oct-2017

Software Availability: Sep-2017

Peak Optimization Flags (Continued)

631.deepsjeng_s: Same as 620.omnetpp_s

641.leela_s: Same as 620.omnetpp_s

Fortran benchmarks:

```
-Wl,-z,muldefs -xCORE-AVX2 -ipo -O3 -no-prec-div  
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte  
-L/usr/local/je5.0.1-64/lib -ljemalloc
```

Peak Other Flags

C benchmarks:

```
-m64 -std=c11
```

C++ benchmarks (except as noted below):

```
-m64
```

623.xalancbmk_s: -m32

Fortran benchmarks:

```
-m64
```

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.2017-10-19.html>
<http://www.spec.org/cpu2017/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/cpu2017/flags/Intel-ic18.0-official-linux64.2017-10-19.xml>
<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-V1.2-SKX-revH.xml>

SPEC is a registered trademark 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 info@spec.org.

Tested with SPEC CPU2017 v1.0.2 on 2017-11-22 14:19:30-0500.

Report generated on 2018-10-31 17:12:46 by CPU2017 PDF formatter v6067.

Originally published on 2018-01-14.