# SPEC CPU®2017 Integer Speed Result

## Hewlett Packard Enterprise

**ProLiant DL385 Gen10 Plus v2**  
(2.00 GHz, AMD EPYC 7663)

### SPECspeed®2017_int_base = 11.6

### SPECspeed®2017_int_peak = 11.6

<table>
<thead>
<tr>
<th>Test Sponsor: HPE</th>
<th>Hardware Availability: Apr-2021</th>
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### Hardware

**CPU Name:** AMD EPYC 7663  
**Max MHz:** 3500  
**Nominal:** 2000  
**Enabled:** 112 cores, 2 chips  
**Orderable:** 1.2 chip(s)  
**Cache L1:** 32 KB I + 32 KB D on chip per core  
**L2:** 512 KB I+D on chip per core  
**L3:** 256 MB I+D on chip per chip, 32 MB shared / 7 cores  
**Other:** None  
**Memory:** 2 TB (16 x 128 GB 4Rx4 PC4-3200AA-L)  
**Storage:** 1 x 182 GB SATA SSD, RAID 0  
**Other:** None

### Software

**OS:** Ubuntu 20.04.1 LTS (x86_64)  
**Kernel:** 5.4.0-42-generic  
**Compiler:** C/C++/Fortran: Version 3.0.0 of AOCC  
**Parallel:** Yes  
**Firmware:** HPE BIOS Version A42 v2.40 02/15/2021 released Feb-2021  
**File System:** ext4  
**System State:** Run level 5 (multi-user)  
**Base Pointers:** 64-bit  
**Peak Pointers:** 64-bit  
**Other:** jemalloc: jemalloc memory allocator library v5.1.0  
**Power Management:** BIOS set to prefer performance at the cost of additional power usage

<table>
<thead>
<tr>
<th>Thread</th>
<th>SPECspeed®2017_int_base (11.6)</th>
<th>SPECspeed®2017_int_peak (11.6)</th>
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<tbody>
<tr>
<td>600.perlbench_s 112</td>
<td>6.14</td>
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<td>602.gcc_s 112</td>
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<td>605.mcf_s 112</td>
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<td>620.omnetpp_s 112</td>
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<tr>
<td>623.xalancbmk_s 112</td>
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<td>625.x264_s 112</td>
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**SPECspeed®2017_int_peak = 11.6**

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

**Compiler Notes**

The AMD64 AOCC Compiler Suite is available at http://developer.amd.com/amd-aocc/

**Submit Notes**

The config file option 'submit' was used.

'numactl' was used to bind copies to the cores.

See the configuration file for details.

**Operating System Notes**

'ulimit -s unlimited' was used to set environment stack size

'ulimit -l 2097152' was used to set environment locked pages in memory limit

runcpu command invoked through numactl i.e.:

numactl --interleave=all runcpu <etc>

'echo 8 > /proc/sys/vm/dirty_ratio' run as root to limit dirty cache to 8% of memory.

'echo 1 > /proc/sys/vm/swappiness' run as root to limit swap usage to minimum necessary.

'echo 1 > /proc/sys/vm/zone_reclaim_mode' run as root to free node-local memory and avoid remote memory usage.

sync; echo 3 > /proc/sys/vm/drop_caches' run as root to reset filesystem caches.

'sysctl -w kernel.randomize_va_space=0' run as root to disable address space layout randomization (ASLR) to reduce run-to-run variability.

(Continued on next page)
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'echo always > /sys/kernel/mm/transparent_hugepage/enabled' and  
'echo always > /sys/kernel/mm/transparent_hugepage/defrag' run as root to enable Transparent Hugepages (THP) for this run.  
'echo madvise > /sys/kernel/mm/transparent_hugepage/enabled' run as root for peak runs of 628.pop2_s and 638.imagick_s to enable THP only on request.

## Environment Variables Notes

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

- **GOMP_CPU_AFFINITY** = "0-111"  
- **LD_LIBRARY_PATH** =  
  
> 

    "/home/cpu2017_B1/amd_speed_aocc300_milan_B_lib/64;/home/cpu2017_B1/amd_speed_aocc300_milan_B_lib/32;"  

- **MALLOC_CONF** = "retain:true"  
- **OMP_DYNAMIC** = "false"  
- **OMP_SCHEDULE** = "static"  
- **OMP_STACKSIZE** = "128M"  
- **OMP_THREAD_LIMIT** = "112"

Environment variables set by runcpu during the 620.omnetpp_s peak run:  
**GOMP_CPU_AFFINITY** = "0"

Environment variables set by runcpu during the 657.xz_s peak run:  
**GOMP_CPU_AFFINITY** = "0-111"

## General Notes

Binaries were compiled on a system with 2x AMD EPYC 7742 CPU + 1TiB Memory using openSUSE 15.2

**NA:** The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.  
**Yes:** The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1) is mitigated in the system as tested and documented.  
**Yes:** The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2) is mitigated in the system as tested and documented.

jemalloc: configured and built with GCC v4.8.2 in RHEL 7.4  
jemalloc 5.1.0 is available here:  
https://github.com/jemalloc/jemalloc/releases/download/5.1.0/jemalloc-5.1.0.tar.bz2

Submitted by: "Bhatnagar, Prateek" <prateek.bhatnagar@hpe.com>  
Submitted: Mon May 24 12:49:23 EDT 2021  
Submission: cpu2017-20210524-26467.sub
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Platform Notes

BIOS Configuration
Workload Profile set to General Peak Frequency Compute
AMD SMT Option set to Disabled
Determinism Control set to Manual
Performance Determinism set to Power Deterministic
Last-Level Cache (LLC) as NUMA Node set to Enabled
NUMA memory domains per socket set to One memory domain per socket
Thermal Configuration set to Maximum Cooling
Workload Profile set to Custom
Infinity Fabric Power Management set to Disabled
Infinity Fabric Performance State set to P0
Power Regulator set to OS Control Mode

Sysinfo program /home/cpu2017_B1/bin/sysinfo
Rev: r6538 of 2020-09-24 e8664e66d2d7080afeaa89d4b38e2f1c
running on dl385g10v2 Wed Apr 1 12:26:24 2020

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 : AMD EPYC 7663 56-Core Processor
  2 "physical id"s (chips)
112 "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 : 56
siblings : 56
physical 0: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
  28 29 30 32 33 34 35 36 37 38 40 41 42 43 44 45 46 48 49 50 51 52 53 54 56 57 58 59
  60 61 62
physical 1: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
  28 29 30 32 33 34 35 36 37 38 40 41 42 43 44 45 46 48 49 50 51 52 53 54 56 57 58 59
  60 61 62

From lscpu:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: LittleEndian
Address sizes: 48 bits physical, 48 bits virtual
CPU(s): 112
On-line CPU(s) list: 0-111
Thread(s) per core: 1
Core(s) per socket: 56
Socket(s): 2
NUMA node(s): 16

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## Platform Notes (Continued)

- **Vendor ID:** AuthenticAMD  
- **CPU family:** 25  
- **Model:** 1  
- **Model name:** AMD EPYC 7663 56-Core Processor  
- **Stepping:** 1  
- **Frequency boost:** enabled  
- **CPU MHz:** 1796.447  
- **CPU max MHz:** 2000.0000  
- **CPU min MHz:** 1500.0000  
- **BogoMIPS:** 3992.45  
- **Virtualization:** AMD-V  
- **L1d cache:** 3.5 MiB  
- **L1i cache:** 3.5 MiB  
- **L2 cache:** 56 MiB  
- **L3 cache:** 512 MiB

**NUMA node0 CPU(s):** 0-6  
**NUMA node1 CPU(s):** 7-13  
**NUMA node2 CPU(s):** 14-20  
**NUMA node3 CPU(s):** 21-27  
**NUMA node4 CPU(s):** 28-34  
**NUMA node5 CPU(s):** 35-41  
**NUMA node6 CPU(s):** 42-48  
**NUMA node7 CPU(s):** 49-55  
**NUMA node8 CPU(s):** 56-62  
**NUMA node9 CPU(s):** 63-69  
**NUMA node10 CPU(s):** 70-76  
**NUMA node11 CPU(s):** 77-83  
**NUMA node12 CPU(s):** 84-90  
**NUMA node13 CPU(s):** 91-97  
**NUMA node14 CPU(s):** 98-104  
**NUMA node15 CPU(s):** 105-111

- **Vulnerability Itlb multihit:** Not affected  
- **Vulnerability L1tf:** Not affected  
- **Vulnerability Mds:** Not affected  
- **Vulnerability Meltdown:** Not affected  
- **Vulnerability Spec store bypass:** Mitigation; Speculative Store Bypass disabled via prctl and seccomp  
- **Vulnerability Spectre v1:** Mitigation; userscopy/swapgs barriers and __user pointer sanitization  
- **Vulnerability Spectre v2:** Mitigation; Full AMD retpoline, IBPB conditional, IBRs_FW, STIBP disabled, RSB filling  
- **Vulnerability Srbds:** Not affected  
- **Vulnerability Tsx async abort:** Not affected  

**Flags:**  
fpu vme de pse tsc msr pae mce cx8 apic sep mtrr  
pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt  
pdpe1gb rdtscp lm constant_tsc rep_good nopl nonstop_tsc cpuid extd_apicid  
aperfmperf pni pclmulqdq monitor ssse3 fma cx16 pcid sse4_1 sse4_2 movbe popcnt aes

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Platform Notes (Continued)

xs save avx f16c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a
misalignsse 3dnowprefetch osvw ibs skinit wdt tce topoext perfctr_core perfctr_nb
bmxext perfctr_llc mwaitx cpb cat_l3 cdp_l3 invpcid_single hw_pstate ssbd mba ibrs
ibpb stibp vmmcall fsgsbase bmi1 avx2 smep bmi2 invpcid cqm rdt_a rdseed adx smap
clfushopt clwb sha_ni xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc
cqm_mbm_total cqm_mbm_local clzero irperf xsaverpr wbooinvd arat npt lbv svm_lock
nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pfthreshold
v_vmsave_vmload vgif umip pku ospke vaes vpclmulqdq rdpid overflow_recov succor smca

/proc/cpuinfo

cache data

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

available: 16 nodes (0-15)
node 0 cpus: 0 1 2 3 4 5 6
node 0 size: 128775 MB
node 0 free: 128524 MB
node 1 cpus: 7 8 9 10 11 12 13
node 1 size: 129022 MB
node 1 free: 128850 MB
node 2 cpus: 14 15 16 17 18 19 20
node 2 size: 129022 MB
node 2 free: 128918 MB
node 3 cpus: 21 22 23 24 25 26 27
node 3 size: 129022 MB
node 3 free: 128893 MB
node 4 cpus: 28 29 30 31 32 33 34
node 4 size: 129022 MB
node 4 free: 128927 MB
node 5 cpus: 35 36 37 38 39 40 41
node 5 size: 129022 MB
node 5 free: 128845 MB
node 6 cpus: 42 43 44 45 46 47 48
node 6 size: 129022 MB
node 6 free: 128924 MB
node 7 cpus: 49 50 51 52 53 54 55
node 7 size: 116909 MB
node 7 free: 116799 MB
node 8 cpus: 56 57 58 59 60 61 62
node 8 size: 129022 MB
node 8 free: 128922 MB
node 9 cpus: 63 64 65 66 67 68 69
node 9 size: 128998 MB
node 9 free: 128889 MB
node 10 cpus: 70 71 72 73 74 75 76
node 10 size: 129022 MB

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Platform Notes (Continued)

    node 10 free: 128912 MB
    node 11 cpus: 77 78 79 80 81 82 83
    node 11 size: 129022 MB
    node 11 free: 128920 MB
    node 12 cpus: 84 85 86 87 88 89 90
    node 12 size: 129022 MB
    node 12 free: 128812 MB
    node 13 cpus: 91 92 93 94 95 96 97
    node 13 size: 129022 MB
    node 13 free: 128819 MB
    node 14 cpus: 98 99 100 101 102 103 104
    node 14 size: 129022 MB
    node 14 free: 128859 MB
    node 15 cpus: 105 106 107 108 110 111
    node 15 size: 129017 MB
    node 15 free: 128859 MB

node distances:
    node 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
    0: 10 11 11 11 11 11 11 32 32 32 32 32 32 32 32
    1: 11 10 11 11 11 11 11 32 32 32 32 32 32 32 32

From /proc/meminfo
MemTotal:     2101215208 kB
HugePages_Total:       0
Hugepagesize:       2048 kB
/sbin/tuned-adm active
Current active profile: throughput-performance
/sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has performance
/usr/bin/lsb_release -d

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Platform Notes (Continued)

Ubuntu 20.04.1 LTS
From /etc/*release* /etc/*version*
debian_version: bullseye/sid
os-release:
  NAME="Ubuntu"
  VERSION="20.04.1 LTS (Focal Fossa)"
  ID=ubuntu
  ID_LIKE=debian
  PRETTY_NAME="Ubuntu 20.04.1 LTS"
  VERSION_ID="20.04"
  HOME_URL="https://www.ubuntu.com/"
  SUPPORT_URL="https://help.ubuntu.com/"

uname -a:
  Linux dl385g10v2 5.4.0-42-generic #46-Ubuntu SMP Fri Jul 10 00:24:02 UTC 2020 x86_64
  x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

CVE-2018-12207 (iTLB Multihit): Not affected
CVE-2018-3620 (L1 Terminal Fault): Not affected
Microarchitectural Data Sampling: Not affected
CVE-2017-5754 (Meltdown): Mitigation: Speculative Store
CVE-2018-3639 (Speculative Store Bypass): Bypass disabled via prctl and
  seccomp
CVE-2017-5753 (Spectre variant 1): Mitigation: usercopy/swaps
  barriers and __user pointer
  sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Full AMD retpoline,
  IBPB: conditional, IBRS_FW, STIBP:
  disabled, RSB filling
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 5 Apr 1 12:23
SPEC is set to: /home/cpu2017_B1

Filesystem Type Size Used Avail Use% Mounted on
/dev/mapper/ubuntu--vg-ubuntu--lv ext4 182G 67G 106G 39% /

From /sys/devices/virtual/dmi/id
Vendor: HPE
Product: ProLiant DL385 Gen10 Plus
Product Family: ProLiant
Serial: CN79340HC3

(Continued on next page)
Platform Notes (Continued)

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.

Memory:
- 16x UNKNOWN M386AAG40AM3-CWE 128 GB 4 rank 3200
- 16x UNKNOWN NOT AVAILABLE

BIOS:
- BIOS Vendor: HPE
- BIOS Version: A42
- BIOS Date: 02/15/2021
- BIOS Revision: 2.40
- Firmware Revision: 2.40

(End of data from sysinfo program)

Compiler Version Notes

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<th>600.perlbench_s(base, peak)</th>
<th>602.gcc_s(base, peak)</th>
<th>605.mcf_s(base, peak)</th>
<th>625.x264_s(base, peak)</th>
<th>657.xz_s(base, peak)</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td></td>
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<tr>
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<td>620.omnetpp_s(base, peak)</td>
<td>623.xalancbmk_s(base, peak)</td>
<td>631.deepsjeng_s(base, peak)</td>
<td>641.leela_s(base, peak)</td>
</tr>
<tr>
<td>AMD clang version 12.0.0</td>
<td>(CLANG: AOCC_3.0.0-Build#78 2020_12_10)</td>
<td>(based on LLVM Mirror.Version.12.0.0)</td>
<td>Target: x86_64-unknown-linux-gnu</td>
<td>Thread model: posix</td>
<td>InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>648.exchange2_s(base, peak)</th>
</tr>
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<tbody>
<tr>
<td>Fortran</td>
<td></td>
</tr>
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Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL385 Gen10 Plus v2
(2.00 GHz, AMD EPYC 7663)

SPECspeed®2017_int_base = 11.6
SPECspeed®2017_int_peak = 11.6

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Apr-2021
Hardware Availability: Apr-2021
Software Availability: Mar-2021

Compiler Version Notes (Continued)

LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin

Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
flang

Base Portability Flags

600.perlbench_s: -DSPEC_LINUX_X64 -DSPEC_LP64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xalancbk_s: -DSPEC_LINUX -DSPEC_LP64
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:
-m64 -mno-adx -mno-sse4a -Wl,-allow-multiple-definition
-W1,-mllv -W1,-enable-lcmm-vrp -W1,-mllv -W1,-region-vectorize
-W1,-mllv -W1,-function-specialize
-W1,-mllv -W1,-align-all-nofallthru-blocks=6
-W1,-mllv -W1,-reduce-array-computations=3 -O3 -march=znver3
-ffast-math
-fstruct-layout=5
-amdlib=AMDLIBM
-flto
-fstruct-layout=5

(Continued on next page)
SPEC CPU®2017 Integer Speed Result

Hewlett Packard Enterprise
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SPECspeed®2017_int_base = 11.6
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Base Optimization Flags (Continued)

C benchmarks (continued):
-mlir -enable-gvn-hoist -mlir -global-vectorize-slp=true
-mlir -enable-licm-vrp -mlir -reduce-array-computations=3 -z muldefs
-DSPEC_OPENMP -fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc
-llang -llangrti

C++ benchmarks:
-m64 -std=c++98 -mno-adx -mno-sse4a
-llvm -mllvm -Wl,-do-block-reorder=aggressive
-llvm -mllvm -Wl,-region-vectorize -llvm -mllvm -Wl,-function-specialize
-llvm -mllvm -Wl,-align-all-nofallthru-blocks=6
-llvm -mllvm -Wl,-reduce-array-computations=3 -03 -march=znver3
-fveclib=AMDLIBM -ffast-math -flto -llvm -enable-partial-unswitch
-mlir -unroll-threshold=100 -finline-aggressive
-flv-function-specialization -mlir -loop-unswitch-threshold=200000
-mlir -reroil-loops -mlir -aggressive-loop-unswitch
-mlir -extra-vectorizer-passes -mlir -reduce-array-computations=3
-mlir -global-vectorize-slp=true -mlir -convert-pow-exp-to-int=false
-z muldefs -mlir -do-block-reorder=aggressive
-fvirtual-function-elimination -fvisibility=hidden -DSPEC_OPENMP
-fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc -llang
-llangrti

Fortran benchmarks:
-m64 -mno-adx -mno-sse4a -Wl,-mllvm -Wl,-inline-recursion=4
-llvm -mllvm -Wl,--lsr-in-nested-loop -Wl,-mllvm -Wl,-enable-iv-split
-llvm -mllvm -Wl,-region-vectorize -llvm -mllvm -Wl,-function-specialize
-llvm -mllvm -Wl,-align-all-nofallthru-blocks=6
-llvm -mllvm -Wl,-reduce-array-computations=3 -03 -march=znver3
-fveclib=AMDLIBM -ffast-math -flto -z muldefs
-mlir -unroll-aggressive -mlir -unroll-threshold=150 -DSPEC_OPENMP
-fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc -llang
-llangrti

Base Other Flags

C benchmarks:
-Wno-unused-command-line-argument -Wno-return-type

C++ benchmarks:
-Wno-unused-command-line-argument -Wno-return-type

Fortran benchmarks:
-Wno-return-type
SPEC CPU®2017 Integer Speed Result

Hewlett Packard Enterprise  
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SPECspeed®2017_int_base = 11.6  
SPECspeed®2017_int_peak = 11.6

CPU2017 License: 3  
Test Sponsor: HPE  
Tested by: HPE

Test Date: Apr-2021  
Hardware Availability: Apr-2021  
Software Availability: Mar-2021

Peak Compiler Invocation

C benchmarks:  
clang

C++ benchmarks:  
clang++

Fortran benchmarks:  
flang

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

600.perlbench_s: basepeak = yes
602.gcc_s: basepeak = yes
605.mcf_s: basepeak = yes
625.x264_s: basepeak = yes

C++ benchmarks:

(Continued on next page)
**SPEC CPU®2017 Integer Speed Result**

Hewlett Packard Enterprise  
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**SPECspeed®2017_int_base = 11.6**  
**SPECspeed®2017_int_peak = 11.6**

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### Peak Optimization Flags (Continued)

620.omnetpp_s: -m64 -std=c++98 -mno-adx -mno-sse4a  
-Wl,-mlllvm -Wl,-do-block-reorder-aggressive  
-Wl,-mlllvm -Wl,-function-specialize  
-Wl,-mlllvm -Wl,-align-all-nofallthru-blocks=6  
-Wl,-mlllvm -Wl,-reduce-array-computations=3 -Ofast  
-march=znver3 -fveclib=AMDLIBM -ffast-math -flto  
-finline-aggressive -mlllvm -unroll-threshold=100  
-flv-function-specialization -mlllvm -enable-licm-vrp  
-mlllvm -reroll-loops -mlllvm -aggressive-loop-unswitch  
-mlllvm -reduce-array-computations=3  
-mlllvm -global-vectorize-slp=true  
-mlllvm -do-block-reorder-aggressive  
-flvirtual-function-elimination -fvisibility=hidden  
-DSPEC_OPENMP -fopenmp -fopenmp=libomp -lomp -lamdllibm  
-ljemalloc -lflang

623.xalancbmk_s: basepeak = yes

631.deepsjeng_s: basepeak = yes

641.leela_s: basepeak = yes

Fortran benchmarks:

648.exchange2_s: basepeak = yes

### Peak Other Flags

C benchmarks:

- Wno-unused-command-line-argument  
- Wno-return-type

C++ benchmarks:

- Wno-unused-command-line-argument  
- Wno-return-type

Fortran benchmarks:

- Wno-return-type

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

http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-AMD-V1.2-EPYC-revP.html  
# SPEC CPU®2017 Integer Speed Result

## Specification

**Hewlett Packard Enterprise**  
(Test Sponsor: HPE)  
ProLiant DL385 Gen10 Plus v2  
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### SPECspeed©2017

- **SPECspeed®2017_int_base** = 11.6  
- **SPECspeed®2017_int_peak** = 11.6

### CPU2017 License:

- 3

### Test Sponsor:

- HPE

### Test Date:

- Apr-2021

### Hardware Availability:

- Apr-2021

### Tested by:

- HPE

### Software Availability:

- Mar-2021

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

- [HPE-Platform-Flags-AMD-V1.2-EPYC-revP.xml](http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-AMD-V1.2-EPYC-revP.xml)

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

Tested with SPEC CPU®2017 v1.1.5 on 2020-04-01 13:26:23-0400.  
Report generated on 2022-07-08 13:00:33 by CPU2017 PDF formatter v6442.  
Originally published on 2021-06-08.