



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

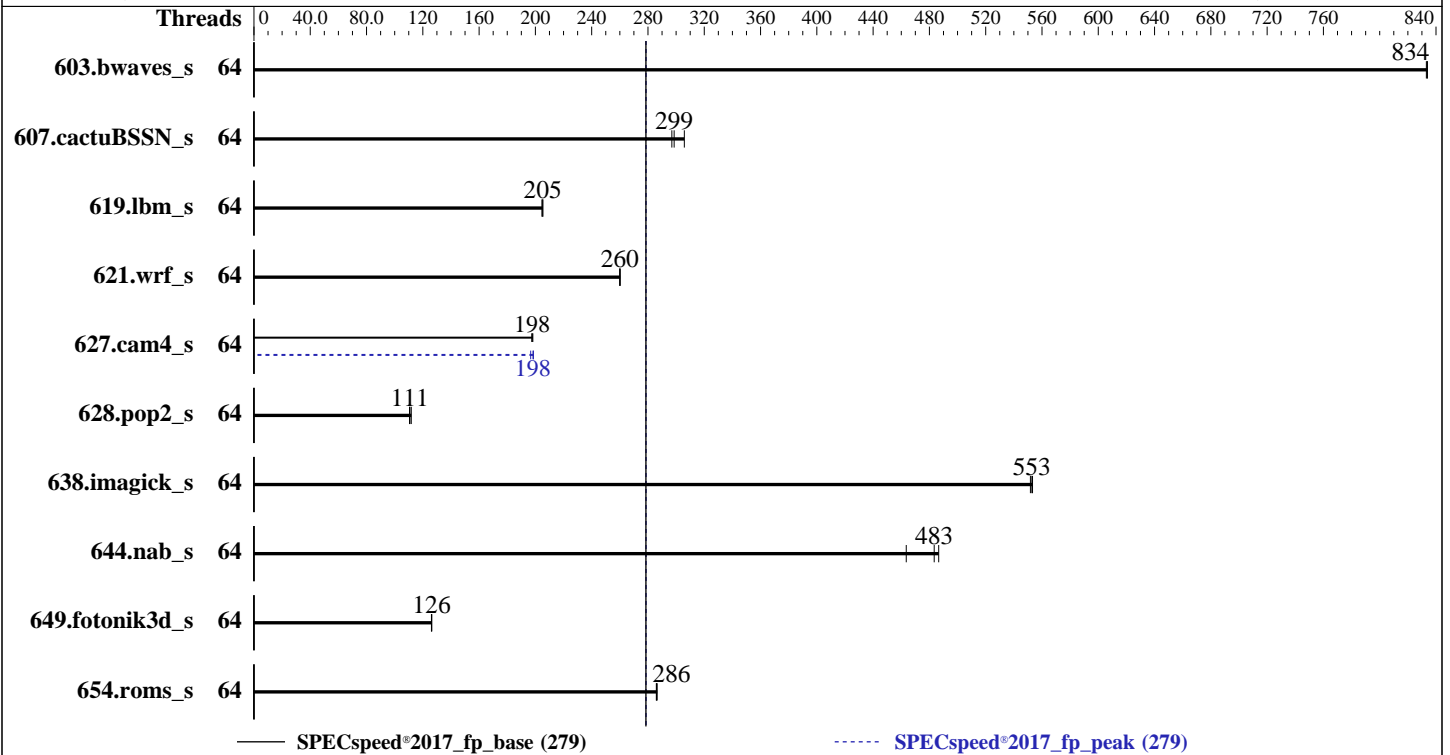
(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

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

Test Date: May-2026
Hardware Availability: May-2026
Software Availability: Jul-2025



Hardware

CPU Name: Intel Xeon 6530P
Max MHz: 4100
Nominal: 2300
Enabled: 32 cores, 1 chip, 2 threads/core
Orderable: 1 Chip
Cache L1: 64 KB I + 48 KB D on chip per core
L2: 2 MB I+D on chip per core
L3: 144 MB I+D on chip per chip
Other: None
Memory: 256 GB (8 x 32 GB 2Rx8 PC5-6400B-R)
Storage: 1 x 6.4 TB NVMe SSD
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP7
Kernel 6.4.0-150700.53.6-default
Compiler: C/C++: Version 2025.2 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2025.2 of Intel Fortran Compiler for Linux;
Parallel: Yes
Firmware: HPE BIOS Version v1.62 02/06/2026 released Feb-2026
File System: btrfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: jemalloc memory allocator V5.0.1
Power Management: BIOS and OS is set to prefer performance at the cost of additional power usage



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

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

Test Date: May-2026
Hardware Availability: May-2026
Software Availability: Jul-2025

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	64	70.8	834	<u>70.8</u>	<u>834</u>	70.8	833	64	70.8	834	<u>70.8</u>	<u>834</u>	70.8	833
607.cactuBSSN_s	64	<u>55.8</u>	<u>299</u>	54.5	306	56.1	297	64	<u>55.8</u>	<u>299</u>	54.5	306	56.1	297
619.lbm_s	64	<u>25.5</u>	<u>205</u>	25.6	205	25.5	205	64	<u>25.5</u>	<u>205</u>	25.6	205	25.5	205
621.wrf_s	64	50.8	260	<u>50.9</u>	<u>260</u>	50.9	260	64	50.8	260	<u>50.9</u>	<u>260</u>	50.9	260
627.cam4_s	64	<u>44.8</u>	<u>198</u>	44.7	198	44.9	197	64	<u>44.7</u>	<u>198</u>	45.1	197	44.6	199
628.pop2_s	64	<u>107</u>	<u>111</u>	106	112	107	111	64	<u>107</u>	<u>111</u>	106	112	107	111
638.imagick_s	64	26.1	553	<u>26.1</u>	<u>553</u>	26.1	552	64	26.1	553	<u>26.1</u>	<u>553</u>	26.1	552
644.nab_s	64	37.7	464	<u>36.1</u>	<u>483</u>	35.9	487	64	37.7	464	<u>36.1</u>	<u>483</u>	35.9	487
649.fotonik3d_s	64	72.2	126	72.3	126	<u>72.2</u>	<u>126</u>	64	72.2	126	72.3	126	<u>72.2</u>	<u>126</u>
654.roms_s	64	54.9	287	<u>55.0</u>	<u>286</u>	55.1	286	64	54.9	287	<u>55.0</u>	<u>286</u>	55.1	286

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

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
Prior to runcpu invocation
Filesystem page cache synced and cleared with:
sync; echo 3> /proc/sys/vm/drop_caches
tuned-adm profile was set to throughput-performance using 'tuned-adm profile throughput-performance'

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
KMP_AFFINITY = "granularity=fine,compact"
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
MALLOCONF = "retain:true"
OMP_STACKSIZE = "192M"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
memory using Redhat Enterprise Linux 8.0
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, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: May-2026

Hardware Availability: May-2026

Software Availability: Jul-2025

Platform Notes

BIOS Configuration: Parameters are selected in the order shown below
 Workload Profile set to General Peak Frequency Compute
 Memory Patrol Scrubbing set to Disabled
 Thermal Configuration set to Maximum Cooling
 Enhanced Processor Performance Profile set to Aggressive
 Last Level Cache (LLC) Prefetch set to Enabled
 Minimum Processor Idle Power Core C-State set to C6 as ACPI C3 State
 Workload Profile set to Custom
 Minimum Processor Idle Power Package C-State set to No Package State

Sysinfo program /home/cpu2017/bin/sysinfo
 Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
 running on localhost Tue May 12 03:37:56 2026

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

----- Table of contents -----

1. uname -a
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 254 (254.27+suse.167.g130293e510)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. BIOS

 1. uname -a
 Linux localhost 6.4.0-150700.53.6-default #1 SMP PREEMPT_DYNAMIC Tue Jul 1 14:54:47 UTC 2025 (8ab7501)
 x86_64 x86_64 x86_64 GNU/Linux

2. w
 03:37:56 up 0 min, 3 users, load average: 0.42, 0.15, 0.05
 USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT

3. Username
 From environment variable \$USER: root

4. ulimit -a

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

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

Test Date: May-2026
Hardware Availability: May-2026
Software Availability: Jul-2025

Platform Notes (Continued)

```

core file size      (blocks, -c) unlimited
data seg size      (kbytes, -d) unlimited
scheduling priority (-e) 0
file size          (blocks, -f) unlimited
pending signals    (-i) 1029834
max locked memory  (kbytes, -l) 8192
max memory size    (kbytes, -m) unlimited
open files         (-n) 1024
pipe size          (512 bytes, -p) 8
POSIX message queues (bytes, -q) 819200
real-time priority (-r) 0
stack size         (kbytes, -s) unlimited
cpu time           (seconds, -t) unlimited
max user processes (-u) 1029834
virtual memory     (kbytes, -v) unlimited
file locks         (-x) unlimited

```

```

-----
5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root [priv]
sshd: root@notty
bash -c cd $SPEC/ && $SPEC/reportable-ic2025.2-lin-graniterapids-speed-smt-off-20250605.sh
runcpu --nobuild --action validate --define default-platform-flags -c
  ic2025.2-lin-graniterapids-speed-20250605.cfg --define cores=64 --tune base,peak -o all --define
  drop_caches fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
  ic2025.2-lin-graniterapids-speed-20250605.cfg --define cores=64 --tune base,peak --output_format all
  --define drop_caches --nopower --runmode speed --tune base:peak --size refspeed fpspeed --nopreenv
  --note-preenv --logfile $SPEC/tmp/CPU2017.001/templogs/preenv.fpspeed.001.0.log --lognum 001.0
  --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017

```

```

-----
6. /proc/cpuinfo
model name      : Intel(R) Xeon(R) 6530P
vendor_id      : GenuineIntel
cpu family     : 6
model          : 173
stepping       : 1
microcode      : 0x1000411
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
cpu cores      : 32
siblings       : 64
1 physical ids (chips)
64 processors (hardware threads)
physical id 0: core ids 0-31
physical id 0: apicids 0-63
Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
virtualized systems. Use the above data carefully.

```

```

-----
7. lscpu

From lscpu from util-linux 2.40.4:
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:         46 bits physical, 57 bits virtual

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

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

Test Date: May-2026
Hardware Availability: May-2026
Software Availability: Jul-2025

Platform Notes (Continued)

```

Byte Order:                Little Endian
CPU(s):                    64
On-line CPU(s) list:      0-63
Vendor ID:                 GenuineIntel
Model name:               Intel(R) Xeon(R) 6530P
CPU family:               6
Model:                    173
Thread(s) per core:      2
Core(s) per socket:      32
Socket(s):                1
Stepping:                 1
BogoMIPS:                 4600.00
Flags:                    fpu vme de pse tsc msr pae mce cx8 apic sep mtrr 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 cpuid aperfmperf tsc_known_freq 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 cpuid_fault epb cat_l3 cat_l2 cdp_l3 intel_ppin
                          cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow
                          flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep
                          bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
                          avx512ifma clflushopt clwb intel_pt avx512cd sha_ni avx512bw
                          avx512vl xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc
                          cqm_mbm_total cqm_mbm_local split_lock_detect user_shstk avx_vnni
                          avx512_bf16 wbnoinvd dtherm ida arat pln pts hfi vnni avx512vbmi
                          umip pku ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq
                          avx512_vnni avx512_bitalg tme avx512_vpoperndq la57 rdpid
                          bus_lock_detect cldemote movdiri movdir64b enqcmd fsrm md_clear
                          serialize tsxldtrk pconfig arch_lbr ibt amx_bf16 avx512_fp16
                          amx_tile amx_int8 flush_lld arch_capabilities

Virtualization:           VT-x
L1d cache:                1.5 MiB (32 instances)
L1i cache:                2 MiB (32 instances)
L2 cache:                 64 MiB (32 instances)
L3 cache:                 144 MiB (1 instance)
NUMA node(s):            1
NUMA node0 CPU(s):       0-63
Vulnerability Gather data sampling: Not affected
Vulnerability Indirect target selection: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf:      Not affected
Vulnerability Mds:       Not affected
Vulnerability Meltdown:  Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed:  Not affected
Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1: Mitigation; usercopy/swaps barriers and __user pointer
                          sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional;
                          PBRSE-eIBRS Not affected; BHI BHI_DIS_S
Vulnerability Srbds:     Not affected
Vulnerability Tsx async abort: Not affected

```

```

From lscpu --cache:
NAME ONE-SIZE ALL-SIZE WAYS TYPE      LEVEL   SETS PHY-LINE COHERENCY-SIZE
L1d      48K      1.5M    12 Data      1       64       1             64

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

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

Test Date: May-2026
Hardware Availability: May-2026
Software Availability: Jul-2025

Platform Notes (Continued)

L1i	64K	2M	16	Instruction	1	64	1	64
L2	2M	64M	16	Unified	2	2048	1	64
L3	144M	144M	16	Unified	3	147456	1	64

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

```
available: 1 nodes (0)
node 0 cpus: 0-63
node 0 size: 257491 MB
node 0 free: 256496 MB
node distances:
node 0
0: 10
```

9. /proc/meminfo

```
MemTotal: 263671392 kB
```

10. who -r

```
run-level 3 May 12 03:37
```

11. Systemd service manager version: systemd 254 (254.27+suse.167.g130293e510)

```
Default Target Status
multi-user running
```

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd bluetooth cron display-manager getty@ irqbalance issue-generator kbdsettings klog lvm2-monitor nscd postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore tuned wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny wpa_supplicant
enabled-runtime	systemd-remount-fs
disabled	NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon autofs autoyast-initscripts blk-availability bluetooth-mesh boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell dnsmasq ebttables exchange-bmc-os-info firewalld fsidd gnome-remote-desktop gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievd issue-add-ssh-keys kexec-load lunmask man-db-create multipathd nfs nfs-blkmap nmb openvpn@ ostree-remount ostree-state-overlay@ rpcbind rpmconfcheck rsyncd rtkit-daemon samba-bgqd serial-getty@ smartd_generate_opts smb snmpd snmptrapd speech-dispatcherd systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd udisks2 update-system-flatpaks upower vncserver@ wpa_supplicant@
indirect	pcscd saned@ systemd-userdbd wickedd

13. Linux kernel boot-time arguments, from /proc/cmdline

```
BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.53.6-default
root=UUID=282b0587-97e1-413a-84ab-5f19f75f0318
splash=silent
mitigations=auto
quiet
security=apparmor
```

14. cpupower frequency-info

```
analyzing CPU 21:
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: May-2026

Hardware Availability: May-2026

Software Availability: Jul-2025

Platform Notes (Continued)

Unable to determine current policy

boost state support:

Supported: yes

Active: yes

15. tuned-adm active

Current active profile: throughput-performance

16. sysctl

kernel.numa_balancing	0
kernel.randomize_va_space	2
vm.compaction_proactiveness	20
vm.dirty_background_bytes	0
vm.dirty_background_ratio	10
vm.dirty_bytes	0
vm.dirty_expire_centisecs	3000
vm.dirty_ratio	40
vm.dirty_writeback_centisecs	500
vm.dirtytime_expire_seconds	43200
vm.extfrag_threshold	500
vm.min_unmapped_ratio	1
vm.nr_hugepages	0
vm.nr_hugepages_mempolicy	0
vm.nr_overcommit_hugepages	0
vm.swappiness	10
vm.watermark_boost_factor	15000
vm.watermark_scale_factor	10
vm.zone_reclaim_mode	0

17. /sys/kernel/mm/transparent_hugepage

defrag	always	defer	defer+madvise	[madvise]	never
enabled	[always]	madvise	never		
hpage_pmd_size	2097152				
shmem_enabled	always	within_size	advise	[never]	deny force

18. /sys/kernel/mm/transparent_hugepage/khugepaged

alloc_sleep_millisecs	60000
defrag	1
max_ptes_none	511
max_ptes_shared	256
max_ptes_swap	64
pages_to_scan	4096
scan_sleep_millisecs	10000

19. OS release

From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP7

20. Disk information

SPEC is set to: /home/cpu2017

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda2	btrfs	5.9T	79G	5.8T	2%	/home

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: May-2026

Hardware Availability: May-2026

Software Availability: Jul-2025

Platform Notes (Continued)

21. /sys/devices/virtual/dmi/id

Vendor: HPE
Product: HPE ProLiant Compute DL340e Gen12
Product Family: ProLiant
Serial: VPR069-P02-04U-H

22. dmidecode

Additional information from dmidecode 3.6 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:

7x Hynix HMC88AHBRA471N 32 GB 2 rank 6400
1x Micron MTC20F2085S1RC64BD2 QSFF 32 GB 2 rank 6400

23. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: HPE
BIOS Version: 1.62
BIOS Date: 02/06/2026
BIOS Revision: 1.62
Firmware Revision: 1.22

Compiler Version Notes

=====
C | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
=====

=====
C++, C, Fortran | 607.cactuBSSN_s(base, peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
=====

=====
Fortran | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)
=====

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
=====

=====
Fortran, C | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)
=====

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: May-2026

Hardware Availability: May-2026

Software Availability: Jul-2025

Compiler Version Notes (Continued)

Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx

Base Portability Flags

```
603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
-assume byterecl
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64
```

Base Optimization Flags

C benchmarks:

```
-w -std=c11 -m64 -Wl,-z,muldefs -xgraniterapids -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xgraniterapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: May-2026

Hardware Availability: May-2026

Software Availability: Jul-2025

Base Optimization Flags (Continued)

Fortran benchmarks (continued):

```
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using both Fortran and C:

```
-w -m64 -std=c11 -Wl,-z,muldefs -xgraniterapids -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using Fortran, C, and C++:

```
-w -std=c++14 -m64 -std=c11 -Wl,-z,muldefs -xgraniterapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int
-mprefer-vector-width=512 -nostandard-realloc-lhs -align array32byte
-auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Peak Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL340e Gen12

(2.30 GHz, Intel Xeon 6530P)

SPECspeed®2017_fp_base = 279

SPECspeed®2017_fp_peak = 279

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: May-2026

Hardware Availability: May-2026

Software Availability: Jul-2025

Peak Optimization Flags (Continued)

619.lbm_s: basepeak = yes

638.imagick_s: basepeak = yes

644.nab_s: basepeak = yes

Fortran benchmarks:

603.bwaves_s: basepeak = yes

649.fotonik3d_s: basepeak = yes

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes

```
627.cam4_s: -w -m64 -std=c11 -Wl,-z,muldefs -xgraniterapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-Wno-implicit-int -mprefer-vector-width=512
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

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

<http://www.spec.org/cpu2017/flags/Intel-ic2025-official-linux64.html>

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-GNR-rev1.6.html>

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

<http://www.spec.org/cpu2017/flags/Intel-ic2025-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-GNR-rev1.6.xml>

SPEC CPU and SPECspeed 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 info@spec.org.

Tested with SPEC CPU®2017 v1.1.9 on 2026-05-11 18:07:56-0400.

Report generated on 2026-06-02 16:16:28 by CPU2017 PDF formatter v6716.

Originally published on 2026-06-02.