



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

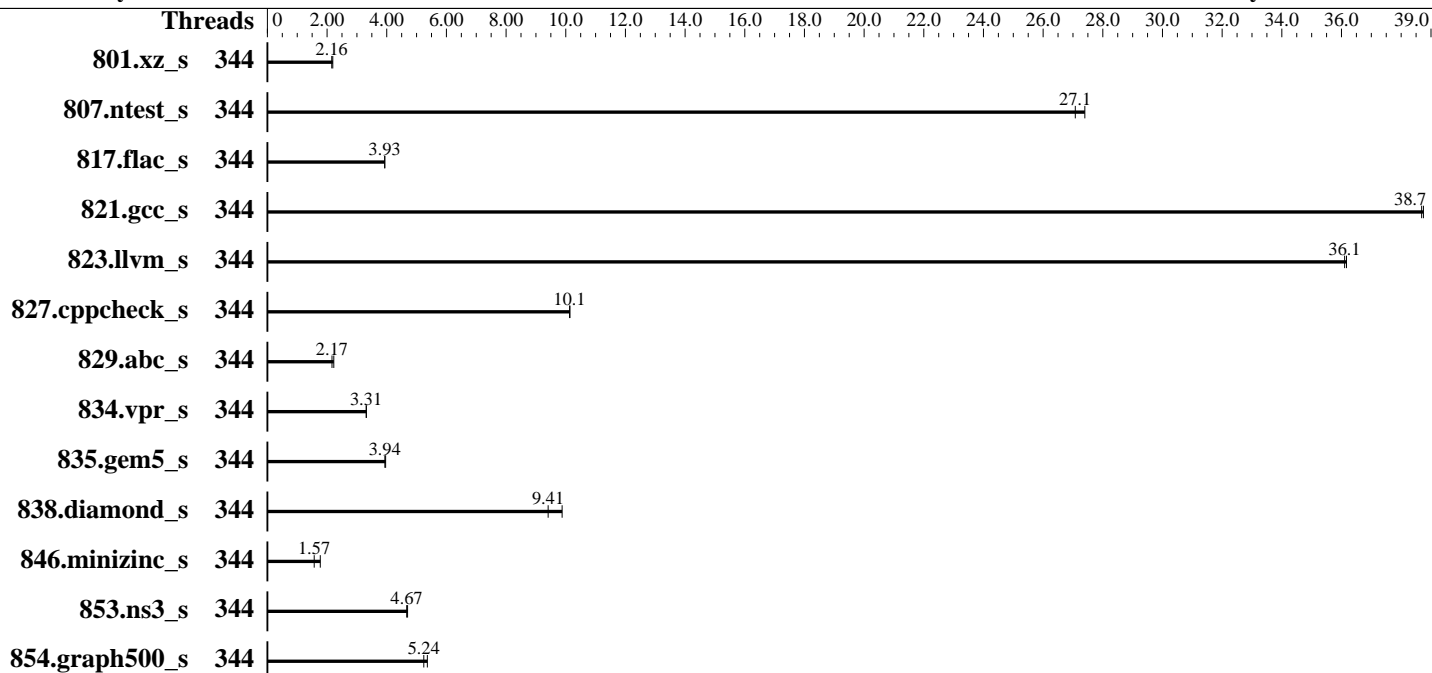
Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026



Hardware

CPU Name: Intel Xeon 6788P
 Max MHz: 3800
 Nominal: 2000
 Enabled: 344 cores, 4 chips
 Orderable: 1,2,4 Chips
 Cache L1: 64 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 336 MB I+D on chip per chip
 Other: None
 Memory: 2 TB (32 x 64 GB 2Rx4 PC5-6400B-R)
 Storage: 1 x 1.6 TB NVMe SSD
 Cooling: Air
 Other: None

Software

OS: Ubuntu 24.04.3 LTS
 Kernel 6.8.0-94-generic
 Compiler: C/C++: Version 2025.3 of Intel oneAPI DPC++/C++ Compiler for Linux;
 Fortran: Version 2025.3 of Intel Fortran Compiler for Linux
 Compiler Category: Vendor
 Firmware: HPE BIOS Version v1.60 released Jan-2026
 File System: ext4
 System State: Run level 5 (multi-user, graphical)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: jemalloc memory allocator v5.3
 Power Management: BIOS is set to prefer performance at the cost of additional power usage



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Feb-2026
Hardware Availability: Jul-2025
Software Availability: Jan-2026

Results Table

Benchmark	Base						Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
801.xz_s	344	274	2.16	270	2.19			344	274	2.16	270	2.19		
807.nctest_s	344	42.1	27.1	41.6	27.4			344	42.1	27.1	41.6	27.4		
817.flac_s	344	441	3.93	442	3.93			344	441	3.93	442	3.93		
821.gcc_s	344	53.5	38.7	53.4	38.7			344	53.5	38.7	53.4	38.7		
823.llvm_s	344	39.0	36.2	39.1	36.1			344	39.0	36.2	39.1	36.1		
827.cppcheck_s	344	110	10.1	110	10.1			344	110	10.1	110	10.1		
829.abc_s	344	384	2.17	373	2.23			344	384	2.17	373	2.23		
834.vpr_s	344	288	3.31	288	3.32			344	288	3.31	288	3.32		
835.gem5_s	344	289	3.94	287	3.96			344	289	3.94	287	3.96		
838.diamond_s	344	106	9.41	101	9.88			344	106	9.41	101	9.88		
846.minizinc_s	344	427	1.57	378	1.77			344	427	1.57	378	1.77		
853.ns3_s	344	247	4.67	245	4.70			344	247	4.67	245	4.70		
854.graph500_s	344	117	5.24	114	5.36			344	117	5.24	114	5.36		

SPECspeed®2026_int_base = **6.45**

SPECspeed®2026_int_peak = **6.45**

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

Environment Variables Notes

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

LD_LIBRARY_PATH = "/home/cpu2026/lib"

MALLOC_CONF = "retain:true"

OMP_STACKSIZE = "192M"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using Red Hat Enterprise Linux 8.4

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®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Platform Notes

BIOS Configurations : Parameters are selected in the order shown below
 Workload Profile set to General Peak Frequency Compute
 Enhanced Processor Performance Profile set to Aggressive
 Thermal Configuration set to Maximum Cooling
 Memory Patrol Scrubbing set to Disabled
 Last Level Cache (LLC) Prefetch set to Enabled
 XPT Prefetch set to Disabled
 Intel UPI Prefetch set to Disabled
 Intel Hyper-Threading set to Disabled
 Workload Profile set to Custom
 Collaborative Power Control set to Enabled

sysinfo program /home/cpu2026/bin/sysinfo
 Rev: 069f95da7e7f5d81b2ce48a82150e54f
 running on admin1 Sat Feb 7 11:29:32 2026

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

 Table of contents

1. uname -srvm
 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 255 (255.4-lubuntu8.12)
 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
- -----

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Platform Notes (Continued)

1. `uname -srvm`
Linux 6.8.0-94-generic #96-Ubuntu SMP PREEMPT_DYNAMIC Fri Jan 9 20:36:55 UTC 2026 x86_64

2. `w`
11:29:32 up 4:22, 3 users, load average: 144.43, 209.99, 236.88

USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
admin1 172.16.0.100 07:16 4:21m 0.00s 0.01s sshd: admin1 [priv]
admin1 172.16.0.100 07:13 4:21m 0.00s 0.02s sshd: admin1 [priv]
admin1 tty1 - 07:10 4:19m 0.03s 0.01s -bash

3. Username
From environment variable \$USER: root
From the command 'logname': admin1

4. `ulimit -a`
time(seconds) unlimited
file(blocks) unlimited
data(kbytes) unlimited
stack(kbytes) unlimited
coredump(blocks) 0
memory(kbytes) unlimited
locked memory(kbytes) 264157384
process 8254598
nofiles 1024
vmemory(kbytes) unlimited
locks unlimited
rtprio 0

5. `sysinfo process ancestry`
/sbin/init
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: admin1 [priv]
sshd: admin1@pts/0
-bash
sudo -i
sudo -i
-bash
-bash
-bash
runcpu --nobuild --reportable --action validate --define default-platform-flags -c
ic2025.3-graniterapids-cpu2026-0.902-speed-20260121.cfg --threads 344 --define cores=344 --tune base -n 2
-o all --define intsppedaffinity --define drop_caches intspped
runcpu --nobuild --reportable --action validate --define default-platform-flags --configfile

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Feb-2026
Hardware Availability: Jul-2025
Software Availability: Jan-2026

Platform Notes (Continued)

```
ic2025.3-graniterapids-cpu2026-0.902-speed-20260121.cfg --threads 344 --define cores=344 --tune base
--iterations 2 --output_format all --define intspeedaffinity --define drop_caches --nopower --runmode
speed --tune base --size refspeed intspeed --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.026/templogs/preenv.intspeed.026.0.log --lognum 026.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026
```

```
-----
6. /proc/cpuinfo
   model name      : Intel(R) Xeon(R) 6788P
   vendor_id       : GenuineIntel
   cpu family      : 6
   model           : 173
   stepping        : 1
   microcode       : 0x1000411
   bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi vmscape
   cpu cores       : 86
   siblings        : 86
   4 physical ids (chips)
   344 processors (hardware threads)
   physical id 0: core ids 0-42,64-106
   physical id 1: core ids 0-42,64-106
   physical id 2: core ids 0-42,64-106
   physical id 3: core ids 0-42,64-106
   physical id 0: apicids
0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,66,68,70,72
,74,76,78,80,82,84,128,130,132,134,136,138,140,142,144,146,148,150,152,154,156,158,160,162,164,166,168,17
0,172,174,176,178,180,182,184,186,188,190,192,194,196,198,200,202,204,206,208,210,212
   physical id 1: apicids
256,258,260,262,264,266,268,270,272,274,276,278,280,282,284,286,288,290,292,294,296,298,300,302,304,306,3
08,310,312,314,316,318,320,322,324,326,328,330,332,334,336,338,340,384,386,388,390,392,394,396,398,400,40
2,404,406,408,410,412,414,416,418,420,422,424,426,428,430,432,434,436,438,440,442,444,446,448,450,452,454
,456,458,460,462,464,466,468
   physical id 2: apicids
512,514,516,518,520,522,524,526,528,530,532,534,536,538,540,542,544,546,548,550,552,554,556,558,560,562,5
64,566,568,570,572,574,576,578,580,582,584,586,588,590,592,594,596,640,642,644,646,648,650,652,654,656,65
8,660,662,664,666,668,670,672,674,676,678,680,682,684,686,688,690,692,694,696,698,700,702,704,706,708,710
,712,714,716,718,720,722,724
   physical id 3: apicids
768,770,772,774,776,778,780,782,784,786,788,790,792,794,796,798,800,802,804,806,808,810,812,814,816,818,8
20,822,824,826,828,830,832,834,836,838,840,842,844,846,848,850,852,896,898,900,902,904,906,908,910,912,91
4,916,918,920,922,924,926,928,930,932,934,936,938,940,942,944,946,948,950,952,954,956,958,960,962,964,966
,968,970,972,974,976,978,980
```

Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for virtualized systems. Use the above data carefully.

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Feb-2026
Hardware Availability: Jul-2025
Software Availability: Jan-2026

Platform Notes (Continued)

7. lscpu

From lscpu from util-linux 2.39.3:

```

Architecture:                x86_64
CPU op-mode(s):              32-bit, 64-bit
Address sizes:                46 bits physical, 57 bits virtual
Byte Order:                   Little Endian
CPU(s):                       344
On-line CPU(s) list:         0-343
Vendor ID:                    GenuineIntel
BIOS Vendor ID:              Intel(R) Corporation
Model name:                   Intel(R) Xeon(R) 6788P
BIOS Model name:              Intel(R) Xeon(R) 6788P  CPU @ 2.0GHz
BIOS CPU family:              179
CPU family:                   6
Model:                        173
Thread(s) per core:          1
Core(s) per socket:          86
Socket(s):                    4
Stepping:                     1
CPU(s) scaling MHz:          22%
CPU max MHz:                  3800.0000
CPU min MHz:                  800.0000
BogoMIPS:                     4000.00

```

```

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 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 hwp
                             hwp_act_window hwp_epp hwp_pkg_req vnmi avx512vbmi umip pku ospke
                             waitpkg avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg
                             tme avx512_vpopcntdq 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_l1d
                             arch_capabilities ibpb_exit_to_user

```

```

Virtualization:              VT-x
L1d cache:                   16.1 MiB (344 instances)
L1i cache:                   21.5 MiB (344 instances)

```

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Feb-2026
Hardware Availability: Jul-2025
Software Availability: Jan-2026

Platform Notes (Continued)

```

L2 cache:                688 MiB (344 instances)
L3 cache:                1.3 GiB (4 instances)
NUMA node(s):            4
NUMA node0 CPU(s):       0-85
NUMA node1 CPU(s):       86-171
NUMA node2 CPU(s):       172-257
NUMA node3 CPU(s):       258-343
Vulnerability Gather data sampling: 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/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2:          Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling;
                                     PBR SB-eIBRS Not affected; BHI BHI_DIS_S
Vulnerability Srbds:              Not affected
Vulnerability Tsx async abort:     Not affected
Vulnerability Vmscape:            Mitigation; IBPB before exit to userspace

```

From `lscpu --cache:`

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	16.1M	12	Data	1	64	1	64
L1i	64K	21.5M	16	Instruction	1	64	1	64
L2	2M	688M	16	Unified	2	2048	1	64
L3	336M	1.3G	16	Unified	3	344064	1	64

8. `numactl --hardware`

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

```

available: 4 nodes (0-3)
node 0 cpus: 0-85
node 0 size: 515546 MB
node 0 free: 473637 MB
node 1 cpus: 86-171
node 1 size: 516066 MB
node 1 free: 513225 MB
node 2 cpus: 172-257
node 2 size: 516066 MB
node 2 free: 513171 MB
node 3 cpus: 258-343
node 3 size: 516049 MB
node 3 free: 510877 MB

```

(Continued on next page)



SPEC CPU[®]2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed[®]2026_int_base = 6.45

SPECspeed[®]2026_int_peak = 6.45

CPU2026 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Feb-2026
Hardware Availability: Jul-2025
Software Availability: Jan-2026

Platform Notes (Continued)

node distances:

node	0	1	2	3
0:	10	21	21	21
1:	21	10	21	21
2:	21	21	10	21
3:	21	21	21	10

```
-----
9. /proc/meminfo
   MemTotal:      2113259076 kB
-----
```

```
-----
10. who -r
    run-level 5 Feb 7 07:08
-----
```

```
-----
11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.12)
    Default Target   Status
    graphical        running
-----
```

```
-----
12. Services, from systemctl list-unit-files
STATE          UNIT FILES
enabled        ModemManager apparmor apport blk-availability cloud-config cloud-final cloud-init
                cloud-init-local console-setup cron dmesg e2scrub_reap finalrd getty@ gpu-manager
                grub-common grub-initrd-fallback keyboard-setup lvm2-monitor multipathd
                networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb
                snapd sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore
                systemd-resolved systemd-timesyncd thermald tuned ua-reboot-cmds ubuntu-advantage udisks2
                ufw unattended-upgrades vgauth
enabled-runtime netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled        console-getty debug-shell iscsid nftables rsync serial-getty@ ssh
                systemd-boot-check-no-failures systemd-confext systemd-network-generator
                systemd-networkd-wait-online@ systemd-pcrlock-file-system systemd-pcrlock-firmware-code
                systemd-pcrlock-firmware-config systemd-pcrlock-machine-id systemd-pcrlock-make-policy
                systemd-pcrlock-secureboot-authority systemd-pcrlock-secureboot-policy systemd-sysext
                systemd-time-wait-sync upower
indirect        systemd-sysupdate systemd-sysupdate-reboot uidd
masked          cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common
-----
```

```
-----
13. Linux kernel boot-time arguments, from /proc/cmdline
    BOOT_IMAGE=/boot/vmlinuz-6.8.0-94-generic
    root=UUID=1167c2a9-3418-41e4-8aa6-434d83833b85
    ro
-----
```

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Platform Notes (Continued)

14. cpupower frequency-info

analyzing CPU 200:

current policy: frequency should be within 800 MHz and 3.80 GHz.

The governor "powersave" may decide which speed to use within this range.

boost state support:

Supported: yes

Active: yes

15. tuned-adm active

Current active profile: balanced

16. sysctl

kernel.numa_balancing	1
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	20
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	60
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+madvice [madvice] never

enabled always [madvice] 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

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Platform Notes (Continued)

```

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 Ubuntu 24.04.3 LTS

```

20. Disk information

SPEC is set to: /home/cpu2026

```

Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p2 ext4  1.5T  295G  1.1T  22% /

```

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

```

Vendor:          HPE
Product:         HPE ProLiant Compute DL580 Gen12
Product Family: ProLiant
Serial:          7CED2FP013

```

22. dmidecode

Additional information from dmidecode 3.5 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:

```

31x Hynix HMCG94AHBRA480N 64 GB 2 rank 6400
1x Hynix HMCG94AHBRA487N 64 GB 2 rank 6400

```

23. BIOS

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

```

BIOS Vendor:      HPE
BIOS Version:     1.60
BIOS Date:        01/09/2026
BIOS Revision:    1.60
Firmware Revision: 1.19

```



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Compiler Version Notes

=====
C | 854.graph500_s(base)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

=====
C++ | 807.ntest_s(base) 827.cppcheck_s(base) 853.ns3_s(base)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

=====
C++, C | 801.xz_s(base) 817.flac_s(base) 821.gcc_s(base) 823.llvm_s(base)
| 829.abc_s(base) 834.vpr_s(base) 835.gem5_s(base) 838.diamond_s(base)
846.minizinc_s(base)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Benchmarks using both C and C++:

icpx icx

Base Portability Flags

801.xz_s: -DSPEC_LP64
807.ntest_s: -DSPEC_LP64
817.flac_s: -DSPEC_LP64
821.gcc_s: -DSPEC_LP64

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Base Portability Flags (Continued)

```
823.llvm_s: -DSPEC_LP64
827.cppcheck_s: -DSPEC_LP64
829.abc_s: -DSPEC_LP64
834.vpr_s: -DSPEC_LP64
835.gem5_s: -DSPEC_LP64
838.diamond_s: -DSPEC_LP64
846.minizinc_s: -DSPEC_LP64
853.ns3_s: -DSPEC_LP64
854.graph500_s: -DSPEC_LP64
```

Base Optimization Flags

C benchmarks:

```
-m64 -std=c18 -Wl,-z,muldefs -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

C++ benchmarks:

```
807.ntest_s: -m64 -std=c++17 -Wl,-z,muldefs -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc-5.3.0/lib
-ljemalloc
```

```
827.cppcheck_s: -m64 -std=c++17 -Wl,-z,muldefs -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-pthread -L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

```
853.ns3_s: -m64 -std=c++17 -Wl,-z,muldefs -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

Benchmarks using both C and C++:

```
801.xz_s: -m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-pthread -L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Base Optimization Flags (Continued)

817.flac_s: Same as 801.xz_s

821.gcc_s: -m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

823.llvm_s: Same as 801.xz_s

829.abc_s: Same as 821.gcc_s

834.vpr_s: Same as 821.gcc_s

835.gem5_s: Same as 801.xz_s

838.diamond_s: Same as 801.xz_s

846.minizinc_s: Same as 801.xz_s

Peak Optimization Flags

C benchmarks:

854.graph500_s: basepeak = yes

C++ benchmarks:

807.ntest_s: basepeak = yes

827.cppcheck_s: basepeak = yes

853.ns3_s: basepeak = yes

Benchmarks using both C and C++:

801.xz_s: basepeak = yes

817.flac_s: basepeak = yes

821.gcc_s: basepeak = yes

823.llvm_s: basepeak = yes

(Continued on next page)



SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12
(2.00 Ghz, Intel Xeon 6788P)

SPECspeed®2026_int_base = 6.45

SPECspeed®2026_int_peak = 6.45

CPU2026 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Feb-2026

Hardware Availability: Jul-2025

Software Availability: Jan-2026

Peak Optimization Flags (Continued)

829.abc_s: basepeak = yes

834.vpr_s: basepeak = yes

835.gem5_s: basepeak = yes

838.diamond_s: basepeak = yes

846.minizinc_s: basepeak = yes

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

<http://www.spec.org/cpu2026/results/flags/HPE-Platform-Flags-Intel-GNR-rev1.4.html>

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.html>

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

<http://www.spec.org/cpu2026/results/flags/HPE-Platform-Flags-Intel-GNR-rev1.4.xml>

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.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®2026 v0.902.0 on 2026-02-07 06:29:31-0500.

Report generated on 2026-05-04 23:33:09 by CPU2026 PDF formatter (unknown).

Originally published on 2026-05-05.