SPEC CPU®2026 Integer Speed Result

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Hewlett Packard Enterprise

(Test Sponsor: HPE)

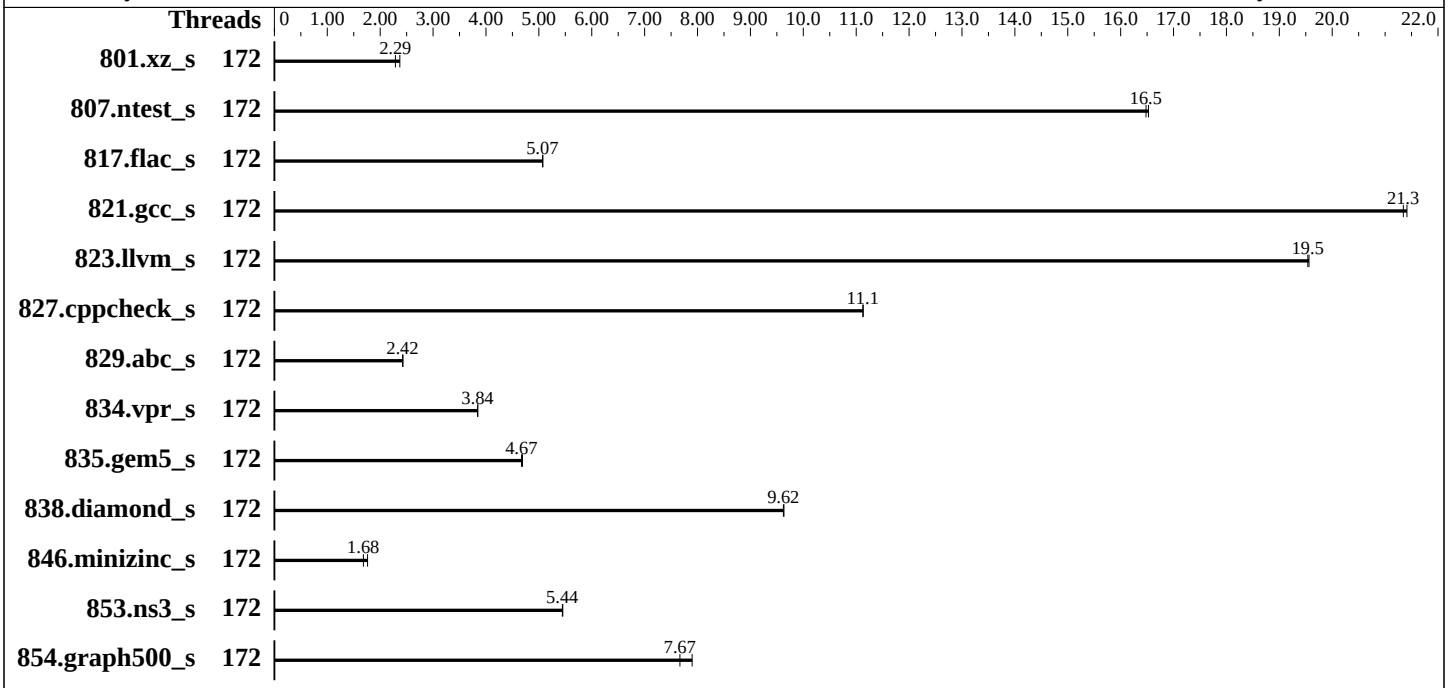
ProLiant Compute DL380 Gen12
(2.00 GHz, Intel Xeon 6787P)

SPECspeed®2026_int_base = 6.33

SPECspeed®2026_int_peak = 6.33

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

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



Hardware

CPU Name:	Intel Xeon 6787P
Max MHz:	3800
Nominal:	2000
Enabled:	172 cores, 2 chips
Orderable:	1,2 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:	512 GB (16 x 32 GB 2Rx8 PC5-6400B-R)
Storage:	1 x 3.2 TB NVMe SSD
Cooling:	Air
Other:	None

Software

OS:	Ubuntu 24.04.3 LTS Kernel 6.8.0-90-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

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Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
801.xz_s	172	249	2.37	**258**	**2.29**			172	249	2.37	**258**	**2.29**		
807.ntest_s	172	69.0	16.5	**69.2**	**16.5**			172	69.0	16.5	**69.2**	**16.5**		
817.flac_s	172	342	5.08	**343**	**5.07**			172	342	5.08	**343**	**5.07**		
821.gcc_s	172	**97.0**	**21.3**	96.7	21.4			172	**97.0**	**21.3**	96.7	21.4		
823.llvm_s	172	72.1	19.6	**72.2**	**19.5**			172	72.1	19.6	**72.2**	**19.5**		
827.cppcheck_s	172	101	11.1	**101**	**11.1**			172	101	11.1	**101**	**11.1**		
829.abc_s	172	342	2.43	**343**	**2.42**			172	342	2.43	**343**	**2.42**		
834.vpr_s	172	**248**	**3.84**	248	3.84			172	**248**	**3.84**	248	3.84		
835.gem5_s	172	243	4.69	**244**	**4.67**			172	243	4.69	**244**	**4.67**		
838.diamond_s	172	104	9.63	**104**	**9.62**			172	104	9.63	**104**	**9.62**		
846.minizinc_s	172	380	1.76	**398**	**1.68**			172	380	1.76	**398**	**1.68**		
853.ns3_s	172	**212**	**5.44**	211	5.45			172	**212**	**5.44**	211	5.45		
854.graph500_s	172	77.4	7.90	**79.7**	**7.67**			172	77.4	7.90	**79.7**	**7.67**		

SPECspeed®2026_int_base = 6.33

SPECspeed®2026_int_peak = 6.33

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
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
```

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)
```

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General Notes (Continued)

```
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
```

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
Intel UPI Prefetch set to Disabled
Intel Hyper-Threading set to Disabled

 Sysinfo program /home/cpu2026/bin/sysinfo
 Rev: 069f95da7e7f5d81b2ce48a82150e54f
 running on admin1 Mon Feb  2 11:32:55 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 (255.4-1ubuntu8.12)
 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
```

(Continued on next page)

Platform Notes (Continued)

```
 20. Disk information
 21. /sys/devices/virtual/dmi/id
 22. dmidecode
 23. BIOS
------------------------------------------------------------

------------------------------------------------------------
1. uname -srvm
  Linux 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 14:14:30 UTC 2025 x86_64

------------------------------------------------------------
2. w
   11:32:55 up 7 min,  2 users,  load average: 0.08, 0.05, 0.03
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU  WHAT
  admin1            172.16.0.100     11:30    7:30   0.00s  0.01s sshd: admin1 [priv]
  admin1   tty1     -                11:29    3:19   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) 66009376
  process              2062473
  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
```

(Continued on next page)

Platform Notes (Continued)

```
 -bash
 runcpu --nobuild --reportable --action validate --define default-platform-flags -c
  ic2025.3-sapphirerapids-cpu2026-0.902-speed-20260121.cfg --threads 172 --define cores=172 --tune base -n 2
   -o all --define intspeedaffinity --define drop_caches intspeed
runcpu --nobuild --reportable --action validate --define default-platform-flags --configfile
  ic2025.3-sapphirerapids-cpu2026-0.902-speed-20260121.cfg --threads 172 --define cores=172 --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/CPU2026.032/templogs/preenv.intspeed.032.0.log --lognum 032.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026

------------------------------------------------------------
6. /proc/cpuinfo
    model name      : Intel(R) Xeon(R) 6787P
    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
    2 physical ids (chips)
    172 processors (hardware threads)
    physical id 0: core ids 0-42,64-106
    physical id 1: 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
 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 2.39.3:
  Architecture:                         x86_64
  CPU op-mode(s):                       32-bit, 64-bit
  Address sizes:                        46 bits physical, 57 bits virtual
  Byte Order:                           Little Endian
```

(Continued on next page)

Platform Notes (Continued)

```
CPU(s):                                172
On-line CPU(s) list:                   0-171
Vendor ID:                             GenuineIntel
BIOS Vendor ID:                        Intel(R) Corporation
Model name:                            Intel(R) Xeon(R) 6787P
BIOS Model name:                       Intel(R) Xeon(R) 6787P  CPU @ 2.0GHz
BIOS CPU family:                       179
CPU family:                            6
Model:                                 173
Thread(s) per core:                    1
Core(s) per socket:                    86
Socket(s):                             2
Stepping:                              1
CPU(s) scaling MHz:                    25%
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:                             8.1 MiB (172 instances)
L1i cache:                             10.8 MiB (172 instances)
L2 cache:                              344 MiB (172 instances)
L3 cache:                              672 MiB (2 instances)
NUMA node(s):                          2
NUMA node0 CPU(s):                     0-85
NUMA node1 CPU(s):                     86-171
Vulnerability Gather data sampling:    Not affected
Vulnerability Itlb multihit:           Not affected
```

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Platform Notes (Continued)

```
  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;
                                       PBRSB-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     8.1M   12 Data            1     64        1             64
     L1i       64K    10.8M   16 Instruction     1     64        1             64
     L2         2M     344M   16 Unified         2   2048        1             64
     L3       336M     672M   16 Unified         3 344064        1             64

------------------------------------------------------------
8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
  available: 2 nodes (0-1)
  node 0 cpus: 0-85
  node 0 size: 257688 MB
  node 0 free: 255747 MB
  node 1 cpus: 86-171
  node 1 size: 258010 MB
  node 1 free: 256420 MB
  node distances:
  node   0   1
    0:  10  21
    1:  21  10

------------------------------------------------------------
9. /proc/meminfo
   MemTotal:       528075036 kB

------------------------------------------------------------
10. who -r
  run-level 5 Feb 2 11:25

------------------------------------------------------------
11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.12)
```

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Platform Notes (Continued)

```
  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 uuidd
  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-6.8.0-90-generic
  root=UUID=ad5aac2c-cf8d-44f6-be2b-66c7b321107b
  ro

------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 137:
    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
  It seems that tuned daemon is not running, preset profile is not activated.
  Preset profile: balanced

------------------------------------------------------------
16. sysctl
  kernel.numa_balancing               1
```

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Platform Notes (Continued)

```
  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+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 Ubuntu 24.04.3 LTS

------------------------------------------------------------
20. Disk information
SPEC is set to: /home/cpu2026
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/sda2      ext4  2.9T  118G  2.7T   5% /
```

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Platform Notes (Continued)

```
------------------------------------------------------------
21. /sys/devices/virtual/dmi/id
    Vendor:         HPE
    Product:        HPE ProLiant Compute DL380 Gen12
    Product Family: ProLiant
    Serial:         CNXD1M02CD

------------------------------------------------------------
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:
    4x Hynix HMCG88AHBRA471N 32 GB 2 rank 6400
    12x Hynix HMCG88AHBRA472N 32 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
```

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.
------------------------------------------------------------------------------

==============================================================================
```

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Compiler Version Notes (Continued)

```
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
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 -xsapphirerapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse

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Base Optimization Flags (Continued)

C benchmarks (continued):
-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 -xsapphirerapids
-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 -xsapphirerapids
-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 -xsapphirerapids
-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 -xsapphirerapids
-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

817.flac_s: Same as 801.xz_s

821.gcc_s: -m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xsapphirerapids
-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

(Continued on next page)

Base Optimization Flags (Continued)

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`

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`

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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®2026 v0.902.0 on 2026-02-02 06:32:54-0500.
Report generated on 2026-08-11 15:16:52 by CPU2026 PDF formatter (unknown).
Originally published on 2026-05-05.