SPEC CPU®2026 Floating Point Rate Result

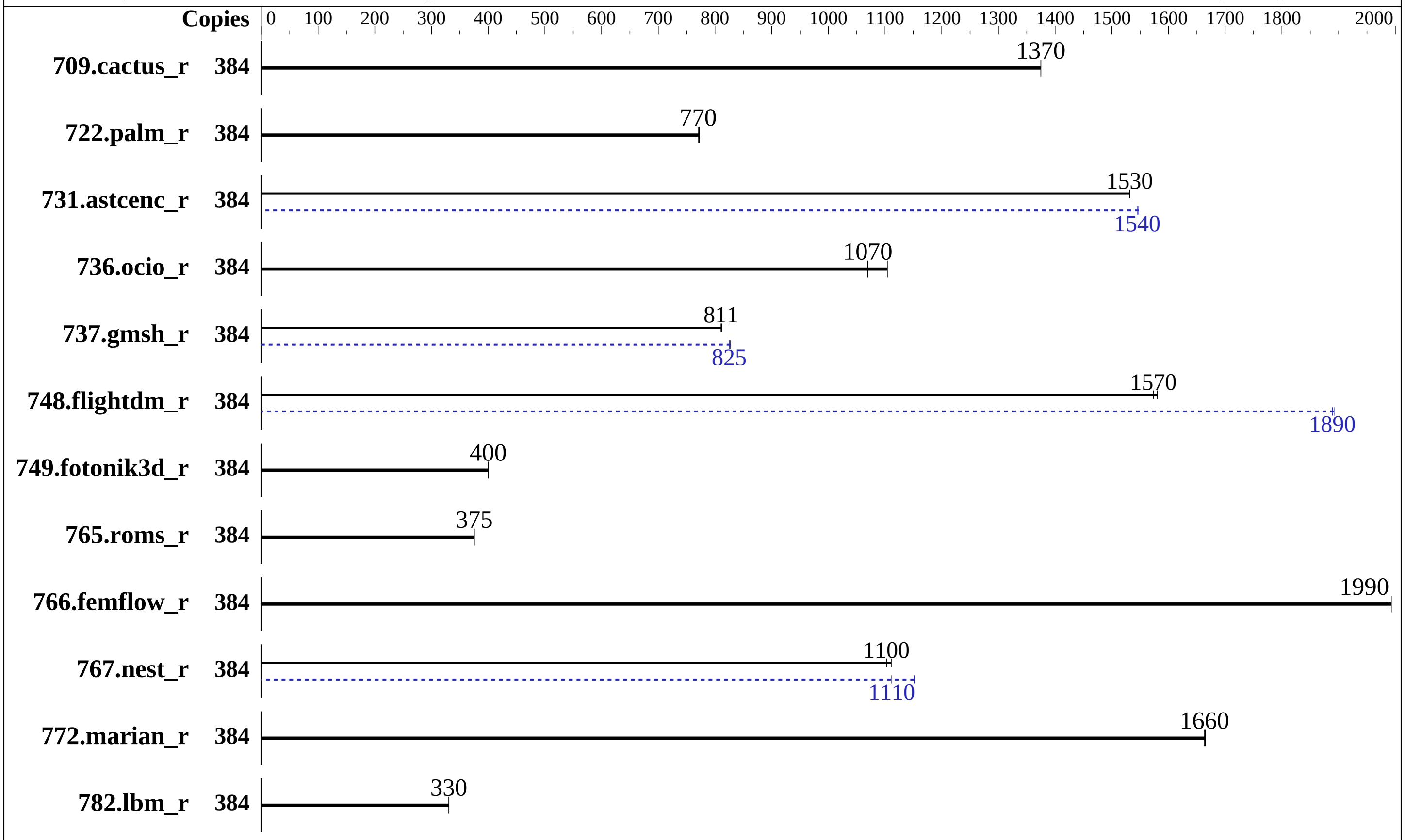
New H3C Technologies Co., Ltd.

H3C UniServer R4900 G7 (Intel Xeon 6970E+)

SPECrate®2026_fp_base = 927

SPECrate®2026_fp_peak = 944

CPU2026 License:	9066	**Test Date:**	Sep-2026
Test Sponsor:	New H3C Technologies Co., Ltd.	**Hardware Availability:**	Jun-2026
Tested by:	New H3C Technologies Co., Ltd.	**Software Availability:**	Apr-2026



Hardware

CPU Name:	Intel Xeon 6970E+
Max MHz:	3200
Nominal:	2300
Enabled:	384 cores, 2 chips
Orderable:	1,2 chips
Cache L1:	64 KB I + 32 KB D on chip per core
L2:	192 MB I+D on chip per chip, 4 MB shared / 4 cores
L3:	480 MB I+D on chip per chip
Other:	None
Memory:	1536 GB (24 x 64 GB 2Rx4 PC5-8000B-R)
Storage:	1 x 3.84 TB NVME SSD
Cooling:	Air
Other:	None

Software

OS:	SUSE Linux Enterprise Server 15 SP7 kernel 6.4.0-150700.51-default
Compiler:	C/C++: Version 2026.0 of Intel oneAPI DPC++/C++ Compiler for Linux; Fortran: Version 2026.0 of Intel Fortran Compiler for Linux
Compiler Category:	Vendor
Firmware:	Version 7.10.25P94 released May-2026 BIOS
File System:	xfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other:	tcmalloc memory allocator v2.18.1
Power Management:	BIOS and OS set to prefer performance at the cost of additional power usage.

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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
709.cactus_r	384	**240**	**1370**	240	1370			384	**240**	**1370**	240	1370		
722.palm_r	384	656	772	**658**	**770**			384	656	772	**658**	**770**		
731.astcenc_r	384	**211**	**1530**	211	1530			384	**209**	**1540**	208	1550		
736.ocio_r	384	**314**	**1070**	304	1100			384	**314**	**1070**	304	1100		
737.gmsh_r	384	217	812	**217**	**811**			384	**214**	**825**	213	827		
748.flightdm_r	384	174	1580	**175**	**1570**			384	145	1890	**146**	**1890**		
749.fotonik3d_r	384	**1110**	**400**	1110	400			384	**1110**	**400**	1110	400		
765.roms_r	384	**1611**	**375**	1610	376			384	**1611**	**375**	1610	376		
766.femflow_r	384	283	1990	**283**	**1990**			384	283	1990	**283**	**1990**		
767.nest_r	384	**276**	**1100**	274	1110			384	264	1150	**274**	**1110**		
772.marian_r	384	**364**	**1660**	364	1670			384	**364**	**1660**	364	1670		
782.lbm_r	384	665	331	**666**	**330**			384	665	331	**666**	**330**		

SPECrate®2026_fp_base = **927**

SPECrate®2026_fp_peak = **944**

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

Submit Notes

```
The numactl mechanism was used to bind copies to processors. The config file option 'submit'
was used to generate numactl commands to bind each copy to a specific processor.
For details, please see the config file.
```

Operating System Notes

```
Stack size set to unlimited using "ulimit -s unlimited"
```

Environment Variables Notes

```
Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/spec2026/lib"
```

General Notes

```
Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
memory using CentOS Stream 9.
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.:
```

(Continued on next page)

General Notes (Continued)

```
 numactl --interleave=all runcpu <etc>
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.
 tcmalloc, a fast, multithreaded malloc implementation
 built with the CentOS Stream 9, and the system compiler gcc 11.5.0
 sources available from github.com/gperftools/gperftools
```

Platform Notes

```
BIOS Settings:
 SNC = Enable
 ACPI C6x Enumeration =  C6 as ACPI C2
 Latency Optimized Mode =  Enabled
BMC Settings:
 Fan mode = powerful mode

 Sysinfo program /home/spec2026/bin/sysinfo
 Rev: 779ab21020787073335a329f3a45e2cd
 running on localhost Mon Sep  7 04:03:01 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 254 (254.24+suse.148.g83b9060b6e)
 12. Failed units, from systemctl list-units --state=failed
 13. Services, from systemctl list-unit-files
 14. Linux kernel boot-time arguments, from /proc/cmdline
 15. cpupower frequency-info
 16. sysctl
 17. /sys/kernel/mm/transparent_hugepage
```

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Platform Notes (Continued)

```
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 -srvm
  Linux 6.4.0-150700.51-default #1 SMP PREEMPT_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611/lp) x86_64

------------------------------------------------------------
2. w
   04:03:01 up  3:53,  1 user,  load average: 118.18, 294.75, 335.62
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
  root     tty1     -                00:13    3:48m  1.74s  0.03s -bash

------------------------------------------------------------
3. Username
  From environment variable $USER:  root

------------------------------------------------------------
4. ulimit -a
  core file size          (blocks, -c) unlimited
  data seg size           (kbytes, -d) unlimited
  scheduling priority             (-e) 0
  file size               (blocks, -f) unlimited
  pending signals                 (-i) 6190019
  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) 6190019
  virtual memory          (kbytes, -v) unlimited
  file locks                      (-x) unlimited

------------------------------------------------------------
5. sysinfo process ancestry
 /usr/lib/systemd/systemd --switched-root --system --deserialize=42
 login -- root
 -bash
 -bash
```

(Continued on next page)

Platform Notes (Continued)

```
 runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 384 -c
   ic2026.0-clearwaterforest-cpu2026-1.0.1-rate-20260429_revB.cfg --define smt-on --define peakfpcopies=192
   --define physicalfirst --define invoke_with_interleave --define drop_caches --reportable --tune base,peak
   -o all fprate
 runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 384 --configfile
   ic2026.0-clearwaterforest-cpu2026-1.0.1-rate-20260429_revB.cfg --define smt-on --define peakfpcopies=192
   --define physicalfirst --define invoke_with_interleave --define drop_caches --reportable --tune base,peak
   --output_format all --nopower --runmode rate --tune base:peak --size refrate fprate --nopreenv
   --note-preenv --logfile $SPEC/tmp/CPU2026.021/templogs/preenv.fprate.021.0.log --lognum 021.0
   --from_runcpu 2
 specperl $SPEC/bin/sysinfo
$SPEC = /home/spec2026

------------------------------------------------------------
6. /proc/cpuinfo
    model name      : Intel(R) Xeon(R) 6970E+
    vendor_id       : GenuineIntel
    cpu family      : 6
    model           : 221
    stepping        : 1
    microcode       : 0x11000120
    bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs
    cpu cores       : 192
    siblings        : 192
    2 physical ids (chips)
    384 processors (hardware threads)
    physical id 0: core ids 0-63,128-191,256-319
    physical id 1: core ids 0-63,128-191,256-319
    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
   ,74,76,78,80,82,84,86,88,90,92,94,96,98,100,102,104,106,108,110,112,114,116,118,120,122,124,126,256,258,2
   60,262,264,266,268,270,272,274,276,278,280,282,284,286,288,290,292,294,296,298,300,302,304,306,308,310,31
   2,314,316,318,320,322,324,326,328,330,332,334,336,338,340,342,344,346,348,350,352,354,356,358,360,362,364
   ,366,368,370,372,374,376,378,380,382,512,514,516,518,520,522,524,526,528,530,532,534,536,538,540,542,544,
   546,548,550,552,554,556,558,560,562,564,566,568,570,572,574,576,578,580,582,584,586,588,590,592,594,596,5
    98,600,602,604,606,608,610,612,614,616,618,620,622,624,626,628,630,632,634,636,638
    physical id 1: apicids
   1024,1026,1028,1030,1032,1034,1036,1038,1040,1042,1044,1046,1048,1050,1052,1054,1056,1058,1060,1062,1064,
   1066,1068,1070,1072,1074,1076,1078,1080,1082,1084,1086,1088,1090,1092,1094,1096,1098,1100,1102,1104,1106,
   1108,1110,1112,1114,1116,1118,1120,1122,1124,1126,1128,1130,1132,1134,1136,1138,1140,1142,1144,1146,1148,
   1150,1280,1282,1284,1286,1288,1290,1292,1294,1296,1298,1300,1302,1304,1306,1308,1310,1312,1314,1316,1318,
   1320,1322,1324,1326,1328,1330,1332,1334,1336,1338,1340,1342,1344,1346,1348,1350,1352,1354,1356,1358,1360,
   1362,1364,1366,1368,1370,1372,1374,1376,1378,1380,1382,1384,1386,1388,1390,1392,1394,1396,1398,1400,1402,
   1404,1406,1536,1538,1540,1542,1544,1546,1548,1550,1552,1554,1556,1558,1560,1562,1564,1566,1568,1570,1572,
   1574,1576,1578,1580,1582,1584,1586,1588,1590,1592,1594,1596,1598,1600,1602,1604,1606,1608,1610,1612,1614,
   1616,1618,1620,1622,1624,1626,1628,1630,1632,1634,1636,1638,1640,1642,1644,1646,1648,1650,1652,1654,1656,
    1658,1660,1662
```

(Continued on next page)

Platform Notes (Continued)

```
  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:                         52 bits physical, 48 bits virtual
  Byte Order:                            Little Endian
  CPU(s):                                384
  On-line CPU(s) list:                   0-383
  Vendor ID:                             GenuineIntel
  Model name:                            Intel(R) Xeon(R) 6970E+
  CPU family:                            6
  Model:                                 221
  Thread(s) per core:                    1
  Core(s) per socket:                    192
  Socket(s):                             2
  Stepping:                              1
  CPU(s) scaling MHz:                    28%
  CPU max MHz:                           3200.0000
  CPU min MHz:                           800.0000
  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 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 rdseed adx smap
                                         clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1 xsaves
                                         cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local split_lock_detect
                                         user_shstk avx_vnni lam wbnoinvd dtherm ida arat pln pts hwp
                                         hwp_act_window hwp_epp hwp_pkg_req vnmi umip pku ospke waitpkg gfni
                                         vaes vpclmulqdq tme rdpid bus_lock_detect cldemote movdiri movdir64b
                                         enqcmd fsrm md_clear serialize pconfig arch_lbr ibt flush_l1d
                                         arch_capabilities
  Virtualization:                        VT-x
  L1d cache:                             12 MiB (384 instances)
  L1i cache:                             24 MiB (384 instances)
  L2 cache:                              384 MiB (96 instances)
  L3 cache:                              960 MiB (2 instances)
```

(Continued on next page)

Platform Notes (Continued)

```
  NUMA node(s):                      6
  NUMA node0 CPU(s):                 0-63
  NUMA node1 CPU(s):                 64-127
  NUMA node2 CPU(s):                 128-191
  NUMA node3 CPU(s):                 192-255
  NUMA node4 CPU(s):                 256-319
  NUMA node5 CPU(s):                 320-383
  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;
                                     PBRSB-eIBRS Not affected; BHI Not affected
  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       32K      12M    8 Data            1     64        1             64
     L1i       64K      24M    8 Instruction     1    128        1             64
     L2         4M     384M   16 Unified         2   4096        1             64
     L3       480M     960M   16 Unified         3 491520        1             64

------------------------------------------------------------
8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
  available: 6 nodes (0-5)
  node 0 cpus: 0-63
  node 0 size: 257498 MB
  node 0 free: 242057 MB
  node 1 cpus: 64-127
  node 1 size: 258030 MB
  node 1 free: 242103 MB
  node 2 cpus: 128-191
  node 2 size: 257992 MB
  node 2 free: 242697 MB
  node 3 cpus: 192-255
  node 3 size: 258030 MB
  node 3 free: 242922 MB
  node 4 cpus: 256-319
```

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Platform Notes (Continued)

```
    node 4 size: 258030 MB
    node 4 free: 242869 MB
    node 5 cpus: 320-383
    node 5 size: 257951 MB
    node 5 free: 242484 MB
    node distances:
    node   0   1   2   3   4   5
      0:  10  15  17  21  28  26
      1:  15  10  15  23  26  23
      2:  17  15  10  26  23  21
      3:  21  28  26  10  15  17
      4:  23  26  23  15  10  15
      5:  26  23  21  17  15  10

  ------------------------------------------------------------
  9. /proc/meminfo
     MemTotal:       1584675796 kB

  ------------------------------------------------------------
  10. who -r
    run-level 3 Sep 7 00:10

  ------------------------------------------------------------
  11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)
    Default Target  Status
    multi-user      degraded

  ------------------------------------------------------------
  12. Failed units, from systemctl list-units --state=failed
      UNIT         LOAD   ACTIVE SUB    DESCRIPTION
    * sep5.service loaded failed failed systemd script to load sep5 driver at boot time

  ------------------------------------------------------------
  13. Services, from systemctl list-unit-files
    STATE            UNIT FILES
    enabled          ModemManager YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd
                     bluetooth chronyd cron display-manager getty@ irqbalance issue-generator kbdsettings klog
                     lvm2-monitor nscd nvmefc-boot-connections nvmf-autoconnect postfix purge-kernels rollback
                     rsyslog sep5 smartd sshd systemd-pstore 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 console-getty cups cups-browsed debug-shell dmraid-activation dnsmasq ebtables
                     exchange-bmc-os-info firewalld fsidd gnome-remote-desktop gpm grub2-once haveged ipmi
                     ipmievd issue-add-ssh-keys kexec-load ksm kvm_stat lunmask man-db-create multipathd nfs
                     nfs-blkmap nmb openvpn@ ostree-remount ostree-state-overlay@ rpcbind rpmconfigcheck rsyncd
```


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Platform Notes (Continued)

```
                  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

------------------------------------------------------------
14. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
  root=UUID=0ae3eb24-ab4b-4b8e-874e-74e44871a98f
  splash=silent
  resume=/dev/disk/by-uuid/ee1f2cac-1352-4dc9-8ca2-e927f2abe04e
  mitigations=auto
  quiet
  security=apparmor

------------------------------------------------------------
15. cpupower frequency-info
  analyzing CPU 53:
    current policy: frequency should be within 800 MHz and 3.20 GHz.
                    The governor "performance" may decide which speed to use
                    within this range.
    boost state support:
      Supported: yes
      Active: yes

------------------------------------------------------------
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
```

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Platform Notes (Continued)

```
------------------------------------------------------------
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/spec2026
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/nvme0n1p3 xfs   3.0T  670G  2.4T  23% /home

------------------------------------------------------------
21. /sys/devices/virtual/dmi/id
    Vendor:         H3C
    Product:        R4900 G7 AP
    Product Family: Rack
    Serial:         210235A5QEH202606251

------------------------------------------------------------
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:
    24x Hynix HMCG94CMBRA772N 64 GB 2 rank 8000


------------------------------------------------------------
```

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Platform Notes (Continued)

```
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor:       American Megatrends International, LLC.
   BIOS Version:      7.10.25P94
   BIOS Date:         05/28/2026
   BIOS Revision:     5.35
   Firmware Revision: 3.1
```

Compiler Version Notes

```
==============================================================================
C       | 782.lbm_r(base, peak)
------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
  Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------

==============================================================================
C++     | 731.astcenc_r(base, peak) 736.ocio_r(base, peak)
        | 748.flightdm_r(base, peak) 766.femflow_r(base, peak)
        | 767.nest_r(base, peak) 772.marian_r(base, peak)
------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
  Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------

==============================================================================
C++, C  | 709.cactus_r(base, peak) 737.gmsh_r(base, peak)
------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
  Version 2026.0.0 Build 20260331
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==============================================================================
Fortran | 722.palm_r(base, peak) 749.fotonik3d_r(base, peak) 765.roms_r(base,
        | peak)
------------------------------------------------------------------------------
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version
  2026.0.0 Build 20260331
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```

Base Compiler Invocation

C benchmarks:
`icx`

C++ benchmarks:
`icpx`

Fortran benchmarks:
`ifx`

Benchmarks using both C and C++:
`icpx icx`

Base Portability Flags

737.gmsh_r: `-fno-associative-math`

Base Optimization Flags

C benchmarks:
```
-m64 -std=c18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xclearwaterforest -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/tcmalloc-2.18.1/lib -ltcmalloc_minimal
```

C++ benchmarks:
```
-m64 -std=c++17 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xclearwaterforest -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/tcmalloc-2.18.1/lib -ltcmalloc_minimal
```

Fortran benchmarks:
```
-m64 -stand f18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xclearwaterforest -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/tcmalloc-2.18.1/lib
-ltcmalloc_minimal
```

Benchmarks using both C and C++:
```
-m64 -std=c++17 -std=c18 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500 -xclearwaterforest -O3
-ffp-model=fast -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -L/usr/local/tcmalloc-2.18.1/lib
```

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Base Optimization Flags (Continued)

Benchmarks using both C and C++ (continued):
-ltcmalloc_minimal

Peak Compiler Invocation

C benchmarks:
icx

C++ benchmarks:
icpx

Fortran benchmarks:
ifx

Benchmarks using both C and C++:
icpx icx

Peak Portability Flags

737.gmsh_r: -fno-associative-math

Peak Optimization Flags

C benchmarks:

782.lbm_r: basepeak = yes

C++ benchmarks:

731.astcenc_r: -m64 -std=c++17 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-ffp-model=fast -xclearwaterforest(pass 2) -flto
-qopt-mem-layout-trans=4 -O3 -mfpmath=sse -funroll-loops
-L/usr/local/tcmalloc-2.18.1/lib -ltcmalloc_minimal

736.ocio_r: basepeak = yes

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Peak Optimization Flags (Continued)

748.flightdm_r: `Same as 731.astcenc_r`

766.femflow_r: `basepeak = yes`

767.nest_r: `Same as 731.astcenc_r`

772.marian_r: `basepeak = yes`

Fortran benchmarks:

722.palm_r: `basepeak = yes`

749.fotonik3d_r: `basepeak = yes`

765.roms_r: `basepeak = yes`

Benchmarks using both C and C++:

709.cactus_r: `basepeak = yes`

737.gmsh_r: `-m64 -std=c++17 -std=c18 -Wl,-z,muldefs`
`-Wl,-plugin-opt=-inline-threshold=1500`
`-fprofile-generate`(pass 1)
`-fprofile-use=default.profdata`(pass 2) `-xCORE-AVX2`(pass 1)
`-ffp-model=fast -xclearwaterforest`(pass 2) `-flto`
`-qopt-mem-layout-trans=4 -O3 -mfpmath=sse -funroll-loops`
`-L/usr/local/tcmalloc-2.18.1/lib -ltcmalloc_minimal`

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.html
http://www.spec.org/cpu2026/results/flags/New_H3C-Platform-Settings-Intel-CWF-RevA.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.xml
http://www.spec.org/cpu2026/results/flags/New_H3C-Platform-Settings-Intel-CWF-RevA.xml

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

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